

**NAVAL POSTGRADUATE SCHOOL  
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**THESIS**

**A QUALITATIVE ANALYSIS OF THE PERFORMANCE  
MEASUREMENT AND OUTCOME MANAGEMENT  
PROCEDURES APPLIED TO THE PLEBE SUMMER  
PROGRAM AT THE UNITED STATES NAVAL ACADEMY**

by

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June 2002

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OUTCOME MANAGEMENT PROCEDURES APPLIED TO THE PLEBE SUMMER  
PROGRAM AT THE UNITED STATES NAVAL ACADEMY**

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## **ABSTRACT**

The United States Naval Academy is the premier source of officers for the Naval service. It is a four-year total immersion educational experience designed to develop midshipmen morally, mentally, and physically and prepare them for service as either a Naval or Marine Corps officer. The Fourth-Class Indoctrination (Plebe Summer) program is the first military training evolution for most members of the incoming plebe class. The seven-week indoctrination course is intended to provide an introduction to military and academy culture as well as to prepare fourth-class midshipmen for integration into the brigade of midshipmen.

This research uses detailed literature reviews and expert interviews to identify the objectives and performance measurement procedures of Plebe Summer. Next it evaluates the performance measurement and outcome management procedures employed by the Naval Academy in assessing Plebe Summer success. Evaluated in this research are the objectives, outcomes, outcome indicators, data collection procedures, and benchmarks applied to the Plebe Summer program. The research indicates that a performance measurement and outcome management system can assist Naval Academy leaders in improving the quality of the Plebe Summer program.

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## **I. INTRODUCTION**

### **A. BACKGROUND**

The United States Naval Academy (USNA) is the premier source of officers for the Naval Service. It provides a four-year total-immersion program where a strong, balanced academic program, focusing on the education needs of the Naval Service is superimposed on a strict, professional military training environment (USNA, 1997). It is the mission of the Naval Academy to:

Develop midshipmen morally, mentally, and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to provide graduates who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship, and government. (USNA, 2001c, p. 3)

Throughout the more than 150-year history of the Naval Academy the institution has evolved from a trade school focused on the arts of seamanship to a highly regarded learning institution. The Naval Academy today provides academic majors in 19 areas including Engineering, Sciences, Humanities, and Economics.

Fourth Class midshipmen (first-year freshmen) are introduced to the Naval Academy culture during an intense seven-week course known as Fourth Class Indoctrination. This course is more commonly referred to as Plebe Summer and historically runs each year from late June through late August. The course is designed to be progressive and demanding training in subjects such as military drill, physical fitness, weapons, and naval history. These topics have been identified as those that are required to produce midshipmen who function effectively within the Academy and the Brigade of Midshipmen (USNA, 2001b, p.6).

Plebe Summer is designed as a three phase course of instruction:

1. First is the Processing Phase. This administrative phase is the shortest phase and is focused on insuring all midshipmen quickly make the administrative transition into the military culture. Areas of concern in this phase include official

welcomes, berthing assignment, uniform and equipment issue, medical evaluations, and academic testing (USNA, 2001b, p.8).

2. Second is the Forming Phase. This phase is slightly more arduous mentally and physically. This phase is designed to instill a sense of teamwork and naval heritage in the midshipmen. Topics taught during this phase include, basic military indoctrination, close order drill, Navy rights and responsibilities. Activities emphasize discipline and teamwork (USNA, 2001b, p.8).

3. The final phase is the Training Phase. This final phase is the longest and most challenging. The primary objective of this phase is progressive development through demanding training and follow-up to insure the incoming Plebe class meets the personal and professional standards expected of midshipmen at the Naval Academy (USNA, 2001b, p. 8). Major topics covered during this phase include moral and character development, code of conduct sailing and professional development, and military drill.

Plebe Summer provides a basic foundation for further midshipman growth. The fundamental purpose of Plebe Summer is preparing midshipmen for the demands of the four-year Naval Academy challenge; it is a simply a first step. Upon completion of Plebe Summer midshipmen begin a rigorous year of training and education (called Fourth Class Development System) designed to challenge them in every aspect of their lives. The year is designed on the philosophy that, “to lead, one must first learn to follow.” (USNA 2001e, p. 2)

Performance measurement; and its extended application, outcome management, are tools gaining increasing popularity within both the private and public sectors. The core principle of outcome management is that program control is made more effective using detailed standards of performance that are measured and reported. “Increasingly companies are moving from management by opinion to management by fact – that is, away from soft science approach to performance measurement” (Harbour, 1997, p. 8). The ability of a high quality performance measurement program will assist program managers by providing relevant information quickly in order to support decision. “The

goal of any performance measurement system is to provide the right people with the right performance-related information at the right time” (Harbour, 1997, p. 8).

Persons accountable for programs apply performance measurement techniques for a number of reasons. Zigon (1998) lists three reasons for performance measurement and performance management that apply to the USNA:

- You cannot manage what you cannot measure.
- You cannot improve what you cannot measure.
- High performance teams and individuals require clear goals.
- Reward systems require metrics.

There is clear evidence that performance measurement and outcome management are important aspects of managing the Plebe Summer program at the United States Naval Academy. Most fundamental is performance measurement’s ability to assist in evaluating the success of the Plebe Summer program in meeting its objectives.

Performance metrics are usually linked with a program’s strategic plan. Strategic plans identify broad goals and objectives while performance metrics provide specific goals and measurable criteria that identify whether goals are met. Thus, performance objectives and metrics are intended to provide focus for those in management positions. “Leading organizations do not stop at the gathering and analysis of performance data; rather, these organizations use performance measurement to drive improvements and successfully translate strategy into action. In other words, they use performance measurement for managing their organizations” (PEA, 1998, p. vii).

The Naval Academy developed its own detailed strategic plan in 1997. The plan is consistently updated (in 2001 and again in 2002) in order to maintain its relevancy. The plan was developed in response to governmental direction to implement mandatory performance measurement systems. All government agencies were directed by the Government Performance and Results Act of 1993 (GPRA) to develop comprehensive plans detailing the mission, goals, and objectives of the agency. Moreover, the GPRA requires a description of how these objectives are to be met and how performance goals

relate to the objectives of the agency. (United States Congress 1993) The USNA plan's foundation lies in eight "focus areas": leadership and professional excellence, physical fitness, naval heritage, academy quality of life, character building, effective communications, admissions excellence and academic excellence (USNA, 2001c, p.8).

Plebe Summer program serves as an indoctrination, and should be designed as an integral part of this strategic plan. The performance metrics should align with and support the goals of the plan. These goals will be addressed later in this thesis.

## B. PURPOSE

The level at which the Naval Academy succeeds in meeting the Plebe Summer objectives is unknown. The objectives of Plebe Summer are diverse. In order to assure Fourth Class midshipmen succeed at the Naval Academy, they must be inculcated with Naval Academy and military cultures and be provided the tools and skills necessary to succeed within the culture during the seven-week Plebe Summer program. Furthermore, they must be prepared to function in demanding fields such as watch standing, teamwork, and military drill. Most importantly, upon completion of Plebe Summer, the midshipmen must be prepared to meet the challenges concerning their moral, mental, and physical development that will continue as the plebes join the brigade of midshipmen.

The purpose of this study is to evaluate performance measurement and outcome management systems of the Naval Academy's Plebe Summer Program and answer the following research questions:

### 1. Primary:

How effective are the performance measurement procedures used in the Plebe Summer program in evaluating the successful accomplishment of Plebe Summer objectives?

### 2. Secondary:

- What are the measurable objectives of Plebe Summer?
- How is the success of Plebe Summer currently measured?

- What current performance measurement procedures are used to assess the success of Plebe Summer objectives?
- How will effective performance measurement techniques increase the effectiveness of the Plebe Summer program?

Deeper understanding of the performance measurement and outcome management of Plebe Summer program can be beneficial to program managers. Answering these research questions will provide the following benefits to the Naval Academy and the Plebe Summer program:

- Improving Plebe Summer effectiveness by identifying and separating procedures that enhance outcome management from procedures that do not.
- Identifying objectives and outcomes of the Plebe Summer Program that are currently not assessed.
- Improvements made in the basic foundation of midshipmen development will ultimately lead to higher levels of achievement of the Naval Academy's overall objectives and mission.
- Careful evaluation of the performance metrics applied to Plebe Summer may also illuminate areas of concern associated with incorrect applications of performance management. Additional motivation to close examination of Plebe Summer performance metrics is given by Perrin (1998) where he says close examination may identify flaws in performance management such as: varying interpretation of terms and concepts, meaningless measures, goal displacement where metrics become goals, lost focus on outcome, and misleading aggregate indicators (p. 5-10).

## C. METHODOLOGY

This research is a qualitative assessment of the performance and outcome measurement processes used to assess the USNA's Plebe Summer program in meeting its objectives. It includes literature reviews and personal semi-structured interviews of Naval Academy Plebe Summer experts. The research provides a qualitative assessment

of outcome measurement methods using Hatry and Kopczynski's Guide to Program Outcome Measurement (1997) as a standard. The process used in this research includes the following steps:

- A thorough literature review of previous performance measurement research. This review will include books, journal articles, internet, CD-ROM, and other electronic media materials dedicated to performance measurement and evaluation.
- A thorough review of all current USNA instructions and directives governing the management of the Plebe Summer program. This review will focus on the purpose, objectives, performance measurement and reporting, and accomplishment of Plebe Summer.
- Thorough semi-structured interviews of expert Naval Academy personnel accountable for Plebe Summer planning, management, and evaluation. The purpose of these interviews is to establish and validate the performance metrics used in the Plebe Summer program.
- Evaluation of current USNA Plebe Summer performance metrics and outcome measurement processes using Hatry and Kopczynski's Guide to Program Outcome Measurement (1997) as a standard of program evaluation.

#### **D. ORGANIZATION OF STUDY**

This study is organized in five chapters. The following briefly describes the contents each chapter of this thesis.

Chapter I introduces the four basic aspects of this research: background, purpose, methodology, and organization of study. The background section describes the function of the United States Naval Academy and the Naval Academy's mission, performance measurement as a method of management within both private and public sectors, and reviews the Naval Academy's strategic plan focusing on its origins and purpose.

Additionally, Chapter I describes the purpose of this research. It introduces the Plebe Summer program, as well as identifies the major research questions of this thesis.

Lastly, this section proposes the benefits of successfully answering the research questions.

Chapter II is divided into three areas. First, chapter two reviews previous performance measurement research and its application in the public sector. The review will focus on the purpose and objectives of performance measurement, terminology, current best practices, the misuse of performance measurement techniques.

The literature review continues with a review of the current USNA strategic plan. The focus of this section is on the plan's purpose and objectives. Lastly, chapter two reviews the current USNA Plebe Summer program. The examination focuses on the purpose, objectives, and methodology of the Plebe Summer program.

Chapter III describes in detail Hatry and Kopczyski's (1997) Guide to Program Outcome Measurement for the Department of Education. This guide provides the model later used to analyze the Plebe Summer outcome and performance measurement processes.

Chapter IV describes the qualitative research process of this thesis. This chapter summarizes the methodological philosophy used to develop the research methods. Also, this chapter outlines the scope and boundaries of the research, explains the interview selection process, and details the questions used in the semi-structured interview process.

In chapter V Plebe Summer performance measurement and outcome management procedures identified in Chapter II and in expert interviews are evaluated using Hatry and Kopczyski's (1997) Guide to Program Outcome Measurement. The results of this evaluation are in this chapter. Additionally, areas that are not currently covered by performance metrics are reported in this chapter.

Chapter VI begins with a summary of the previous chapters. This last chapter continues with conclusions by making a qualitative decision answering the primary research question. Recommendations concerning Plebe Summer performance measurement as well as recommendations for further studies will follow the conclusions. Chapter VI will identify the connection between performance measurement, the strategic

plan, and the management of the Plebe Summer program in an effort to better support the thesis' answers of the research questions.

## **II. LITERATURE REVIEW**

### **A. INTRODUCTION**

This chapter begins with a review of current literature in the area of performance measurement and outcome management. Specific focus is given to the area of performance measurement. Next the chapter reviews the United States Naval Academy's strategic plan and current performance measurement techniques. Finally, the chapter reviews the Naval Academy's Plebe Summer program. The Plebe Summer review centers on the goals, objectives, procedures, and curriculum of the program as well as current performance and outcome measuring procedures.

### **B. PERFORMANCE MEASUREMENT**

Leading and controlling organizations has grown more difficult for a number of reasons. The size and complexity of organizations has increased. Additionally, the rate of technologic change has also accelerated. These changes coupled with increases in diversity among customers, employees, markets, and stakeholders create difficult management and control obstacles. Kaplan and Norton (1996) identify the necessity for business to change in the face of the "Information Revolution":

Companies are in the midst of a revolutionary transformation. Industrial age competition is shifting to information age competition. During the industrial age, from 1850 to about 1975, companies succeeded by how well they could capture the benefits from economies of scale to scope. Technology mattered, but, ultimately, success accrued to companies that could embed the new technology into physical assets that offered efficient, mass production of standard products (p. 2).

However, they say, a new business environment has emerged and this new environment poses new challenges:

The emergence of the information era, however, in the last decades of the twentieth century, made obsolete many of the fundamental assumptions of industrial age competition. No longer could companies gain sustainable competitive advantage by merely deploying new technology into physical assets rapidly, and by excellent management of financial assets and liabilities (Kaplan and Norton, 1996, p. 3).

New assumptions that provide the foundation of information age organizations are provided by Kaplan and Norton (1996): integrated cross function business processes, integrated links to customers and suppliers, customized products to various customer segments, global scale in order to provide adequate returns, innovation, and investment in knowledge workers (p.4-5). Many organizations have recognized these new challenges and have attempted to improve their processes in order to meet them. However many organizations are not succeeding in meeting the new challenges. Kaplan and Norton (1996) offer performance management as a solution.

Many of these improvement programs have yielded disappointing results. The programs are often fragmented. They may not be linked to the organization's strategy, nor to achieving specific financial and economic outcomes. Breakthroughs in performance require major change, and that includes changes in the measurement and management systems used by an organization. Navigating to a more competitive, technological, and capability-driven future cannot be accomplished merely by monitoring and controlling financial measures of past performance (p.6).

Attempting to overcome these obstacles, private sector organizations continually search for management systems that provide an economic edge over competitors. Performance measurement and management is one such system. World-class organizations use performance measurement systems to determine whether they are fulfilling their vision and meeting their customer-focused strategic goals (NPR, 1997, p.13). In short, performance measurement is the process of assessing progress toward organizational goals, including the efficiency with which resources are changed into outputs, the quality of outputs, outcomes achieved and the overall effectiveness of the organization's efforts toward their mission (NPR, 1997, p. 4)

In 1993, President Clinton signed into law the Government Performance and Results Act (GPRA). This legislation forced federal government agencies to adopt the practice of strategic management. The act lists six purposes for the GPRA, among those listed are:

- Improve the confidence of the American people in the capability of the Federal Government, by systematically holding Federal agencies accountable for achieving program results.

- Improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction.
- Help Federal managers improve service delivery, by requiring that they plan for meeting program objectives and by providing them with information about program results and service quality.
- Improve internal management of the Federal Government (USC, 1993, p. 1).

The GPRA requires all governmental agencies to design and submit strategic plans to the President and the Congress. Strategic plans are required to include agency goals, performance objectives, and performance metrics to indicate success or failure in meeting agency goals. Each governmental agency is then required to report, to the President and the Congress, annually on agency performance based on their strategic plans and performance objectives (USC, 1993, p. 1). Therefore, by signing the GPRA President Clinton institutionalized strategic management, performance management, and performance measurement throughout the federal government.

Performance measurement and management has been widely studied and reported on. In general they have each received very positive support (Kaplan and Norton, 1996; Harbour, 1997; Arveson, 1998a; PEA, 1998; Zigon, 1998; NPR, 1999; Belz, 1999; Hatry, 1997; Kamensky, 2001). Many public and private organizations have shifted (or are shifting) to management systems that include performance measurement techniques (PEA, 1998). These management shifts have been undertaken in order to better control various concerns such as productivity, efficiency, profitability, and customer and employee satisfaction (NPR 1997).

However, performance measurement has not received universal praise (Scheirer, 2000, Perrin, 1998; Arveson, 1998b, 1998c). Most of the concern about performance measurement and management centers on the fact that performance measures illustrate only how a company or program is performing. Performance measurement techniques cannot indicate why a company or program achieves its level of performance. The disconnect between performance measurement and causal forces continues to be a source of criticism throughout the literature (Schreier, 2000).

## **1. Goals And Objectives**

Performance management systems are designed to provide information required for the fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it. Performance measurement is a tool that when properly employed focuses organizational attention in order to better plan and execute strategic actions. The strategic focus provided by performance management is intended to result in improved organizational outputs and outcomes and is built on a foundation of performance measurement. NPR (1997) suggests that best-in-class organizations use measurement information to: set goals and standards; detect and correct problems; manage, describe, and improve processes; and document accomplishments (p.31).

Performance measurement is one of many available tools that organizations use to manage their processes and control their organizational outputs and outcomes. The PEA (1998) describes how organizations exploit performance measurement and outcome management to assist in the management of their programs:

One of the hallmarks of leading-edge organizations – be they public or private – has been the successful application of performance measurement to gain insight into, and make judgments about the organization and the effectiveness and efficiency of its programs, processes, and people. However, leading organizations do not stop at the gathering and analysis of performance data; rather these organizations use performance measurement to drive improvements and successfully translate strategy into action. In other words, they use performance measurement for managing their organizations (p. vii).

The National Partnership for Reinventing Government (1997) echoes this view:

All high-performance organizations are, and must be, interested in developing and deploying effective performance measurement and performance management systems, since it is only through such systems that they can remain high-performance organizations (p. 1).

Additionally, Hatry and Kopczynski,(1997) say that not only performance should be measured. They express a need to also measure program outcomes:

Developing program outcome information is a critical step in developing a high quality performance measurement system for programs and projects for the federal government. Good program management requires collection and use of outcome data to provide guidance for improvement. Without information on results, managers can only supervise “inputs” or monitor processes. Decisions on whether the program is actually working well-or needs changing-are made in the absence of hard data on actual outcomes (p. 6).

Organizations must first recognize, before taking action, the rationale on which performance measurement is founded. A great deal of the research postulates why organizations should undertake performance measurement (Averson, 1998a; Czarnecki, 1999; Frost, 2000; NPR, 1997, 1999; PEA, 1998; Frost, 2000). There are four basic reasons most organizations undertake performance measurement:

- You cannot manage what you cannot measure. In the absence of performance measurement managers cannot set goals, provide feedback, or communicate success.
- You cannot improve what you cannot measure. Without performance data managers cannot evaluate if program alterations result in actual program improvement.
- High performance teams and individuals require clear goals. Clear goals are required so excellent performance can be recognized in highly diverse and intricate organizations.
- Reward systems require metrics. When pay or rewards are based on performance, then managers require some way of knowing when reward has been earned (Zigon, 1998, p.1).

Additionally, the National Center for Public Productivity (1997) identifies other benefits performance measurement provide public organizations such as greater accountability of managers, increase in service to public, and stimulation of public participation (NCPP, 1997, p.3).

The objective of performance management in the public sector can thus be defined as the detailed development and exploitation of performance metrics that

measure the success of organizational long-term and short-term strategic goals in order to increase service effectiveness. As performance management matures and becomes more established it becomes more important; thus it implies measure-based, strategy-driven organizational control (Frost, 2000).

## **2. Performance Measurement Terminology**

Before getting deeper into performance measurement and performance management, it is useful to define the many terms used in this field. The literature offers a variety of similar but varying definitions for many of the performance measurement terms (NPR, 1997; Hatry and Kopczynski, 1997; Frost, 2000; Harbour, 1997). The following definitions will be used in this research to standardize the terms:

**Performance Measurement:** The regular, ongoing measurement, and reporting on important performance aspects of organizational programs.

**Performance Measure:** A quantitative or qualitative characterization of performance.

**Benchmark:** What outcome indicators or performance measure information is compared to. Benchmarks provide a comparison for data. Benchmarks provide the minimum level of performance or change acceptable.

**Performance Management:** The use of performance measurement information to help set agreed-upon performance goals, allocate and prioritize resources, inform managers to either confirm or change current organizational policies and procedures, and report the success in meeting organizational goals.

**Inputs:** The amount of organizational inputs applied (i.e. amount of funds, time, or man-hours).

**Outputs:** Amount of organizational product completed (i.e. work processed, test scores, number and quality of products)

**Outcomes:** Not what organizations do, but the consequences of their actions. Outcomes happen outside the organizations such as to customers or other organizations whose behavior the organization hopes to affect. Outcomes are classified as either

intermediate or end. Intermediate outcomes take actions that lead to end outcomes. End outcomes are the final desired results of the program's work.

**Outcome Indicator:** This is not the same as outcomes. Outcome indicators specify what is to be measured. Specific indicators will depend on the type of data collection used. Outcome indicators identify specific numerical values that indicate progress toward achieving an outcome (such as percentage or ratio).

**Outcome Measurement Process:** The process for selecting outcome indicators and, subsequently, regularly obtaining and reporting data on the indicators. Outcome indicators are required for every significant program objective.

**Impact:** The extent to which a program actually caused an outcome.

### 3. Best Practices

There are a variety of methods to employ the principles of performance measurement and performance management (Kaplan and Norton, 1996; Hatry and Kopczynski, 1997; NPR, 1997; PEA. 1998). Each approach possesses its own unique set of strengths and weaknesses, as well as challenges and opportunities. However, there are several characteristics of successful performance management systems that have been identified as likely to result in success. The National Partnership for Reinventing Government (1997) studied and reported on the performance management operations among 32 “best-in-class” organizations. A number of “best practices” were identified. Because world-class organizations use performance measurement systems to determine whether they are fulfilling their vision and meeting their customer-focused strategic goals, their performance measures must therefore meet the following criteria (NPR,1997, p.13):

- Ensure narrow, strategic focus. The measures and goals an organization sets should be narrowly focused to a critical few. It is neither possible nor desirable to measure everything (NPR, 1997, p.13). Attempting to measure too much, or everything, leads to data overload. In this situation managers cannot distinguish important from irrelevant data.

- Measure the right thing. Before deciding on specific measures, an organization should identify and thoroughly understand the processes to be measured. Then, each key process should be mapped to ensure (1) a thorough, rather than assumed understanding of the process; and (2) that a measure central to the success of the process is chosen. In some cases, targets, minimums, or maximums are defined for each measure (NPR, 1997, p.13). This begins with first identifying what the organization must do well and developing a measure that represents this process (PEA, 1999, p.15).
- Be a means, not an end. In a best-in-class organization, employees and managers understand and work toward the desired outcomes that are the core of their organization's vision. They focus on achieving organizational goals by using performance measures to gauge goal achievement but do not focus on the measures per se. Performance measurement is thus seen as a means, not an end (NPR, 1997, p. 13).

The NPR (1997), from their research, provides public sector agencies with key strategies to implement performance management systems that meet the GPRA requirements. The NPR recommends a seven-step process:

1. Establish and update performance measures and goals. For each organizational goal or objective performance baseline, targets, and measures need to be established. In general a good measure:
  - a. Is accepted by and meaningful to the customer;
  - b. Tells how well goals and objectives are being met;
  - c. Is simple, understandable, logical, and repeatable;
  - d. Shows a trend;
  - e. Is unambiguously defined;
  - f. Allows for economical data collection;
  - g. Is timely and sensitive;

The typical definition of measures includes specific goals, data requirements, calculation methodology, and rationale for the measure (NPR, 1997, p. 33-34).

2. Establish accountability for performance. Both organizational and individual responsibilities need to be identified for the performance measures. In some organizations, goal targets do not become official until it is agreed to through a negotiation process between the goal owner and management. This ensures a high degree of integrity in the process and the people involved (NPR, 1997, p.34).

3. Establish data collection process. Measures must be timely, easy to implement, and clearly defined. Speed is essential in data collection and distribution. Data collection should not be overly structured. Management should define who is responsible to ensure data collection is collected and processed accurately and reliably. Automation should be used whenever possible in order to reduce burden on the workforce (NPR, 1997, p. 35).

4. Establish data analysis and reporting process. Various processes can be used to analyze, validate, and report measurement results. The most common processes are operations research, quality control, and statistical and qualitative analysis (NPR, 1997, p. 36).

5. Evaluate and use performance information. Performance information must be formally reviewed and action upon to improve or simplify process. This provides management feedback for adjusting future performance plans and resources. The June 2, 1997 Federal Times cites several examples of agencies improving and refining performance measures:

a. Instead of counting the number of forecasts it makes, the National Weather Service measures the warning time given to the public before severe weather. The lead-time before tornadoes increased from seven minutes to nine minutes.

b. Instead of tracking the response time to questions about veterans' eligibility for burial on its grounds, the National Cemetery System is trying to

improve the scheduling of burial services. Its goal is to finalize a date within two hours of receiving a request. (NPR, 1997, p. 36)

6. Report performance to customers and stakeholders. Data should be reported and performance explained internally and externally across the organization. Reporting can be done using paper documents, internet, television, annual reports, or other multimedia methods (NPR, 1997, p.36).

7. Repeat the process. Sharing performance information with management, customers, and stakeholders facilitates deeper understanding among all parties. Each stakeholder can provide positive information to update and revise performance measurement systems for improvement. Therefore, the systems are not static and must constantly renew themselves (NPR, 1997, p. 37)

#### **4. Misuses of Performance Measurement**

Perrin (1998) provides valuable balance to the enthusiastic support performance measurement programs have received. His article provides insights to many of the limitations of performance measurement. He says, “Performance measurement programs, by themselves, are not appropriate for assessing outcomes, for determining future directions or for resource allocation. They can, however, be one important component of a comprehensive evaluation strategy” (p. 1). Moreover, he says that performance measurement programs are not living up to their billing as a means to ensure focus on results, produce greater accountability, or providing control over expenditures (Perrin, 1998, p. 2).

Perrin (1998) identifies eight limitations of applying performance measures to determine program performance:

1. Varying interpretations of the “same terms and concepts: Regardless of how clearly defined performance measures seem they can be interpreted differently among individuals. This inconsistency among staff can result in inaccuracies that make measures meaningless in the long term (Perrin, 1998, p. 4)

2. Goal Displacement: When measures become the objective, they result in “goal displacement”. This, in turn, emphasizes the wrong activities without improving

actual outcomes. The Viet Nam body count serves as a classic example of how too great a focus on measures reduced overall mission effectiveness (Perrin, 1998, p. 5).

3. Use of meaningless or irrelevant measures: Performance measures are a simplification of a complex system.

Attempting to reduce a complex program or social intervention, such as initiatives in child welfare, economic development, or health promotion, to a small number of quantitative indicators can disguise and mislead rather than inform what is really happening. Thus performance measures can confuse performance “indicators” with the underlying reality (Perrin, 1998, p. 6).

4. Cost savings vs. Cost shifting: Performance measures are unable to indicate underlying realities of a program. Therefore, they are unable to indicate if a performance measures are indicating true savings or simply shifting costs to the future.

5. Critical subgroup differences disguised by misleading aggregate indicators: Performance measures often do not separate larger groups and apply performance data inaccurately across then group as a whole. This will tend to disguise indicators that could be more accurate if disaggregated by race, gender, age, education, etc (Perrin, 1998, p. 7)

6. Limitations of objective-based approaches to evaluation: Performance management programs do not take a situational approach while applying performance data. Effective programs may be penalized by a performance management program for responding to changes in its environment that have not been updated in the overall performance management program (Perrin, 1998, p.8).

7. Useless for decision making and resource allocation: Although one of the primary justifications for performance measurement is its ability to provide for more informed decision making, by itself, it is useless for this purpose. Performance measures can indicate what is happening in a program but it cannot indicate why. Therefore, managers must investigate further, and not rely on performance measures alone, when deciding on actions and resource allocations (Perrin, 1998, p.8)

8. Less focus on outcomes: Performance measurement leads to less rather than more focus on outcomes, innovation, and improvements. The results obtained from narrow focus on numbers limits staff empowerment, innovation, and self-evaluation. Too much focused placed on data collection leads to impaired performance and a reluctance to admit that improvement is required (Perrin, 1998, p. 8).

## **C. NAVAL ACADEMY STRATEGIC PLANNING AND PERFORMANCE MEASUREMENT**

### **1. Naval Academy Strategic Plan**

The United States Naval Academy (USNA) is the premier source of officers for the Naval Service. It provides a four-year total-immersion program where a strong, balanced academic program, focusing on the education needs of the Naval Service is superimposed on a strict, professional military training environment (USNA, 1997, p.1). Throughout the more than 150-year history of the Naval Academy the institution has evolved from a trade school focused on the arts of seamanship to a highly regarded learning institution. The Naval Academy today provides academic majors in 19 areas including Engineering, Sciences, Humanities, and Economics.

In response to the GPRA the USNA developed and published, in 1998, its first strategic plan to address its mission and vision. The strategic plan has been consistently updated yearly since its publication. The plan is designed to avoid mission drift, maintain appropriate balance between academic, professional, and athletic programs, and provides the foresight and focus to make decisions that will benefit the Brigade of Midshipmen and the Naval Academy for 10 years (USNA, 2001c, p. 2).

The USNA's strategic plan has a pyramid structure as shown in Figure 1. The principal element of the plan is the Naval Academy's vision. The vision of the strategic planners was to produce a Naval Academy that would:

Provide leaders of great character, competence, vision and drive to transform the Navy and Marine Corps and serve the nation in a century of promise and uncertainty (USNA, 2001c, p. 4)

Supporting the vision is the Naval Academy's mission:

Develop midshipmen morally, mentally, and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to

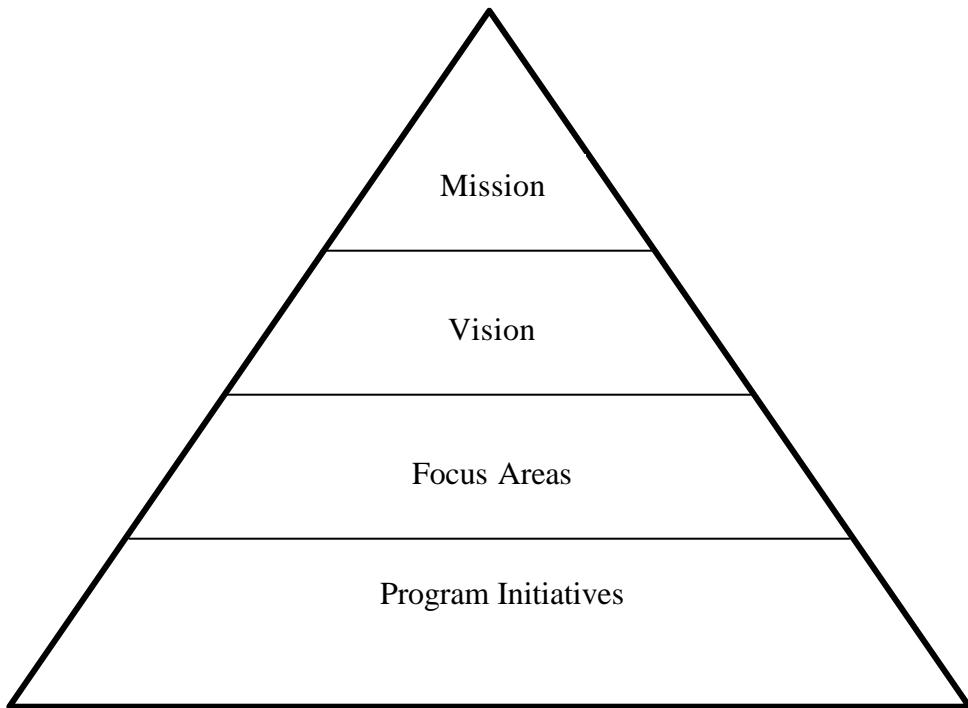


Figure 1: Naval Academy Strategic Plan Structure [From: USNA, 2001c. p. 3-6]

provide graduates who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship, and government (USNA, 2001c, p. 3).

To support the vision and mission, the USNA strategic plan employs eight institutional focus areas. Each focus area is designed to address a different aspect of the Naval Academy and is described below.

- Academic Excellence will focus on instructional and learning philosophies designed to promote critical thinking and lifelong learning. Moreover, this focus area is designed to provide faculty and staff resources to become and remain leaders in their respective disciplines.
- Admissions Excellence will focus Academy efforts to attract the best qualified men and women willing to accept the challenges of the naval.

- Effective Communications is designed to provide Academy programs and support structures that will give midshipmen outstanding written and verbal communication skills. Also, it is designed to give midshipmen an opportunity to practice open, honest, and respectful communication skills.
- Character Building focuses on developing midshipmen who are committed to selfless service, high moral standards, ethical behavior, and inculcated with the Naval Service's core values of honor, courage, and commitment.
- Leadership and Professional Excellence will prepare midshipmen for the challenges of fleet service in leadership roles. It will instill a deep respect for the Constitution and support the commitment to high moral standards.
- Physical Fitness is intended provide midshipmen exemplary programs designed to physically challenge midshipmen and promote lifelong physical fitness.
- Naval Heritage is a focus area intended to imbue midshipmen with an appreciation and respect of selfless service that are representative of naval heritage.
- Academy Quality of Life receives focus to ensure a high quality of life for midshipmen and staff. This focus area is also intended to provide programs and facilities that enrich the cultural, recreational, and spiritual experiences for the various elements of the Naval Academy community (USNA, 2001c, p. 9).

The foundation of the USNA strategic plan is a constantly updated set of tactical and strategic initiatives. These initiatives are designed and implemented to improve current Academy facilities and programs or to create new programs where none previously existed. As the primary source of officers for the Navy and Marine Corps the Naval Academy has set very high quality goals for its graduates. The Academy strategic plan provides the following list of graduate attributes:

- Prepared to lead in combat;

- Courageous leaders who take responsibility for their personal and professional decisions and actions;
- Role models of ethical behavior and moral conduct;
- Exemplars of academic, technical and tactical competence;
- Individuals with a passion and commitment to lifelong learning and physical fitness;
- Highly effective communicators;
- Leaders who recognize and value individual excellence regardless of gender or cultural and ethnic background;
- Able to understand and integrate geopolitical complexities in their decision making across the spectrum of military operations;
- Patriots who epitomize the rich heritage, honor and traditions of the Navy, Marine Corps, and our country (USNA, 2001d, p. 1)

## **2. Naval Academy Performance Measurement**

The Naval Academy is currently using its strategic plan as the underpinning to plan and measure the development of midshipmen who exemplify the previous nine qualities. This section reports the current performance measurement used by the Naval Academy to monitor its progress and processes in achieving its vision and mission.

Two theses were written in 1999 which investigated performance measurement techniques used at the Naval Academy (Belz, 1999; Boone, Hagen, and Utrotska, 1999). Both theses have two aspects in common. Both investigated the means by which Naval Academy Company Officers evaluated midshipmen development and both used Chang and DeYoung's (1995) Measurement Linkage Model as the basis of their investigation.

Each thesis identified the Naval Academy's mission as the source of three key results areas: the moral, mental, and physical development of midshipmen. However, Boone et al. added an additional key results area: professional development. Belz and Boone et al. interviewed Company Officers to obtain key indicators for each key results

areas, analyzed the information obtained using Chang and DeYoung's model, and then reported their findings. Figure 2 lists the key results areas and key indicators for each area listed by Belz and Boone et al.

The theses provide insight into the use of performance measurement and management techniques used at the Naval Academy. The performance measurement process at the Naval Academy primarily focuses on three areas: 1) academic performance, 2) physical fitness, and 3) honor and conduct. Data is collected, stored, and retrieved using the Midshipman Information Data System (MIDS). The MIDS system, however, does not provide any analysis function. It is used only as a database and conduit of raw information.

These two theses concentrate on the performance measurement procedures applied by Company Officers to assess performance on a company-wide scale. They do not represent performance measurement of Naval Academy programs. No research has been conducted focusing on all-encompassing performance management at the Naval Academy or performance measurement applied to individual programs or curriculum such as Plebe Summer.

Surveys are an important performance measurement and outcome measurement tool (Hatrty and Kopczski, 1997, p. 41). The Naval Academy annually conducts two important opinion surveys of midshipmen. First is the honor survey. This survey collects information pertaining to midshipmen perceptions of the honor concept and its applicability to the Academy. Second is midshipman summer-training survey. This survey collects midshipmen feedback concerning the usefulness and applicability of training received during summer sessions. Summer training includes professional practical education onboard ships, air squadrons, or United States Marine units.

## **D. FOURTH CLASS INDOCTRINATION (PLEBE SUMMER) PROGRAM**

### **1. Introduction**

Fourth Class Indoctrination (Plebe Summer) program is the first phase in the Naval Academy's year-long Fourth Class Midshipman Development System (USNA 2001a, p. 1). The second phase of Fourth Class Development System is the Fourth Class

Academic Year that focuses on training, vice indoctrination which is the focus of Plebe Summer. The two phases together are designed to complement each other and ultimately lead to the transition of midshipmen from civilian and enlisted status to Naval Academy Midshipmen (USNA, 2001b, p. 5). This section reviews the purpose, goals, and objectives of the Plebe Summer program and details the program as outlined in Naval Academy Instructions.

<b><u>Belz</u></b>	
<b>Key Results Areas</b>	<b>Key Indicators</b>
Moral Development	None
Mental Development	GPA Absences
Physical Development	PE Grades Physical Readiness Test Scores
<b>Boone, Hagen &amp; Utroska</b>	
<b>Key Results Areas</b>	<b>Key Indicators</b>
Moral Development	Honor Offenses/Counseling Conduct Offenses/Demerits Community Involvement
Mental Development	GPA Number of Honor Students Academic Extracurricular Activities Academic Boards/Probation/UNSATs Study Hours
Physical Development	Physical Readiness Test Scores PE Failures/Grades Weight and Body Fat Standards
Professional Development	Absences
	Professional Development Grades Uniform/Room Inspection Grades 4/C Professional Quiz and Boards\ Performance Grades

Figure 2: Belz and Boone et al. Key Results Areas and Key Indicators

Fourth Class Indoctrination (Plebe Summer) serves as the introduction to the Naval Academy for midshipmen. The majority of midshipmen enter the Naval Academy

directly from high school and are experiencing their first extended period away from home. However, there are also a number of incoming midshipmen (approximately 20%) who enter the academy from fleet units or preparatory schools. Although these midshipmen possess experience in military culture, Plebe Summer serves as an introduction to the demands of the Naval Academy for them as well.

Plebe Summer lasts for 49 days starting with Induction Day (I-Day) and concluding with the reform of the brigade and the start of the academic year. Plebe Summer encompasses progressive and demanding training in those subjects required to produce midshipmen who function effectively in the brigade, are trained in drill, are physically fit, and practice those personal and professional traits which distinguish them as midshipmen at the United States Naval Academy (USNA, 2001b, p. 6). Plebe training is not designed as an “initiation”. It is, rather, an indoctrination to military and academy life intended to prepare fourth-class midshipmen for the rigorous challenges they will face during the four-year academy curriculum.

The Naval Academy lists the following Plebe Summer objectives:

- Effect the transition from civilian or enlisted to officer candidate status.
- Indoctrinate and train midshipmen in proper military discipline, courtesy, requirements and traits of special trust and confidence, teamwork, and personal accountability.
- Provide basic training in seamanship, marksmanship, military drill, watch standing, and customs and traditions of the Naval service (USNA, 2001b, p. 6).

There are three distinct phases of Plebe Summer: the Processing, Forming, and Training phases. As midshipmen progress from one phase to another they face increasingly stressful and challenging environments. The following reports the purpose and primary focus of each phase.

The Processing Phase is designed to facilitate the administrative transition from civilian to military life. This includes equipment and uniform issue, room set-up, and all

the necessary administrative transition paperwork. As much as feasible, the schedule is filled with military instruction in a low stress environment (USNA, 2001b, p. 8). The Processing Phase lasts for four days. Subjects focused on during this phase include academic testing, introduction to religious programs, medical physicals, swim testing, and marksmanship testing.

Training-day five marks the beginning of the Forming Phase. This phase is distinguished from the Processing Phase by an increase in stress and pace of activities. The purpose of this segment is to concentrate on basic military indoctrination, instilling discipline, developing teamwork, and promoting a good sense of Naval Heritage (USNA, 2001b, p. 8). This phase is designed to onto the midshipmen a foundation of base-level knowledge and spirit that will be used in the last phase of Plebe Summer. Important subjects covered during this period include close-order drill, character development education, introduction to Navy rights and responsibilities, and professional counseling.

The last and longest phase is the Training Phase. The primary objective of this phase is continued progressive development through demanding training and follow-up to ensure the incoming Plebe class meets the personal and professional standards expected of midshipmen (USNA, 2001b, p. 8). Upon completion of the Training Phase midshipmen are expected to meet the following training objectives:

- Know all basic rates (professional knowledge requirements)
- Properly wear all uniforms
- Be able to provide directions to any significant location on campus
- Be qualified in small sailing craft and small arms
- Be qualified to properly stand military watches to include: Company Mate of the Deck (CMOD), and Main Office Messenger (MOM)
- Demonstrate a complete working knowledge of Midshipman Regulations
- Achieve at least a grade of “C” on the Physical Readiness Test

## **2. Training Topics**

Training and enculturation is the focus of Plebe Summer. Therefore, there are specific Naval Academy instructions that schedule, guide, and control the training and cultural indoctrination process (USNA 1996; USNA, 2001a; 2001b, USNA, 2001f; USNA, 2001g). There are eight focus areas of Plebe Summer training (USNA 2001a). Focus areas are distinguished from one another by distinct objectives. Each focus area has discrete lesson topics associated with its requisite objectives:

- Command Religious Programs is an introduction to worship opportunities at the Academy and provides time for midshipmen to meet with Academy chaplains. Additionally, chaplains meet with midshipmen in small groups to discuss issues such as adjustment to USNA and interpersonal relationships.
- Physical Education training is comprised of two parts, physical conditioning, testing, and training and introduction to various sports opportunities.
- Academic focus area provides midshipmen with an introduction to their academic careers at the Academy. It includes a series of placement exams, advising sessions, and curriculum briefs.
- Supply objectives include all equipment and gear logistics. Therefore, Supply is referred to as activities rather than training or instruction.
- Administrative focus area provides time periods to fill out all required paperwork and general administration following induction.
- Medical/Dental provides time for initial examinations. Additional training is provided in first aid, smoking cessation, drug and alcohol abuse, and personal hygiene.
- Professional Development is designed to introduce midshipmen to various professional skills. These include sailing, damage control, career information, and visual signals training. Midshipmen are provided training in three levels of small sailing craft; knockabouts, lasers, and Navy 44's.

- Commandant of Midshipman time is the largest and most diverse focus area. It serves as a “catch-all” for topics not associated with the previous seven focus areas. Topics covered in this focus area include Honor Training, Military History, Close-order drill, character development, and others. (USNA, 2001a, p. 4-20)

Appendix A lists the lesson topics and activities for each focus area. Topics in each focus areas are presented to midshipmen in an assortment of formats also listed in Appendix A. The following is a description of training formats:

- Instruction (Inst) is a period of training for which specific terminal training objectives exist. Upon completion of an instruction period, plebes will have gained a new skill or knowledge that is testable at some future time.
- Brief (Brief) is a period of instruction for which no terminal training objectives exist. Although information gained will be useful at some future time, information is not testable. Examples are Superintendent and Commandant of Midshipmen briefs.
- Administrative Event (AdmnEvnt) is a period of time required for administration of regimental requirements such as haircuts and equipment issue. No training objectives are associated with these events
- Operational Events (OpEvnt) are required for regiment-wide operations. Examples are visits to the Holocaust Museum and Baltimore Orioles baseball game. No training objectives are associated with these events.
- Examinations (Exam) are used to determine skill or knowledge level of midshipmen. These time periods are used to evaluate training effectiveness. (USNA, 2001a, p. 3)

The majority of training is in the form of Squad Leader Instruction (SLI) periods. Plebes receive twenty-two hours of SLI as outlined in Appendix B. These instructional periods present Plebes with information to facilitate the transition from civilian to military life (USNA, 2001a, p.53).

### **3. Plebe Performance Evaluation**

Plebe development is measured through written examination, verbal examination, inspections, physical fitness tests, and practical application. Plebes must pass written examinations in the subjects of nautical rules of the road, damage control, and visual signaling. A score of 70% is required to pass written exams. Verbal examination are conducted in the form of “rates”. Plebes are assigned professional knowledge that must be acquired according schedule. They are verbally quizzed (rated) by instructors to assess their level of knowledge. If plebes fail to demonstrate assigned professional knowledge they receive additional training and are immediately re-tested.

Plebes are inspected often during Plebe Summer. Primarily inspections are conducted on uniform appearance and room cleanliness. Failure in any inspection receives immediate remediation and correction. (USNA, 2001b, p. 5-31)

Physical fitness training and testing are a large part of Plebe Summer. The Physical Readiness Test (PRT) is conducted three times during Plebe Summer; each plebe must participate in an initial, intermediate, and final PRT. The PRT consists of three elements: 1) number of pushups in two minutes, 2) number of sit-ups in two minutes, and 3) timed 1 ½ mile run. Plebes failing to pass the initial or intermediate PRT's receive remediation throughout Plebe Summer (USNA, 2001b, p.22).

Practical application of training received in weapons, sailing, and visual signals are required during Plebe Summer. Plebes receive the opportunity to qualify in small sailing craft and weapons (USNA, 2001a, p. 32) Additionally, Plebes must qualify a professional watch, the Midshipman Mate of the Deck.

Plebes receive formal evaluations from midshipman detailers twice during Plebe Summer. Counseling sheets are retained by squad leaders to record any item considered significant in the plebe's development (USNA, 2001a, p 5-25). Upper-class midshipmen provide evaluation of the Plebes in the following areas: personal appearance, military bearing, attitude, professional knowledge, self-confidence, watch standing, military drill, room appearance, and conduct. Plebes receive a subjective grade of excellent, average, or below average in each area. Also, academic and military performance tests are

recorded on plebe evaluations. In areas where Plebes are evaluated as below average, remediation is provided (USNA, 2001a, p. 5-25).

#### **E. CHAPTER SUMMARY**

This chapter has reviewed current literature addressing performance measurement and management and its potential benefits in assisting organizations to change in the face of diverse cultural and technological advance. The purpose, goals and objectives, best practices, and terminology of performance management were reviewed. The chapter also reviewed the 1993 Government Performance and Results Act and how the act institutionalized performance management in the federal government.

Although most literature provides positive support for performance measurement and management, the chapter reviewed some possible drawbacks and pitfalls to performance management that organizations must take into account performance measurement programs are developed.

The United States Naval Academy is subject to the GPRA and has developed its own strategic plan. The plan was introduced in this chapter as well as its purpose, objectives, and goals.

Finally, the Naval Academy's Plebe Summer program was introduced. The introduction included the purpose, goals, objectives, and training curriculum of plebe summer as well as Plebe evaluation. The remaining chapters of this thesis will more deeply examine how the Naval Academy uses performance management to evaluate the effectiveness of the Plebe Summer program in meeting its objectives.

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### **III. PERFORMANCE MEASUREMENT MODEL**

#### **A. INTRODUCTION**

There are numerous performance measurement models. This chapter describes Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement for the Department of Education. This model provides procedures and recommendations for developing an outcome measurement process for individual educational programs (Hatr y and Kopczynski, 1997, p. 1). The focus of the model is on developing a system that identifies and measures outcome indicators rather than other performance measures such as goals, outputs, or processes:

Without information on results, managers can only supervise “inputs” or monitor processes. Decisions on whether the program is actually working well – or what needs changing – are made in the absence of hard data on actual outcomes (Hatr y and Kopczynski, 1997, p. 1).

Furthermore, the philosophical premise of the model is that outcome measurement has four basic applications (1997, p. 2):

- First and foremost outcome information should help program managers and their staff track how their programs are performing. That information, in turn, assists program managers and guides improvement efforts. The information should, for example, indicate where, when and under what conditions outcomes appear to be satisfactory or not satisfactory.
- Second, outcome information can be useful for developing and justifying budgets and for formulating recommendations as to needed legislation and policy.
- Third, outcome information is used by governing organizations in establishing accountability of programs for program quality and outcomes.
- Lastly, outcome information can be used to help communicate with and inform customers and the public at large as to the extent to which progress is being made.

The model's structure is simple. It consists of twelve steps divided into two categories: three preliminary steps and nine process/implementation steps. The intention of the model is to assist managers in developing high quality performance measurement systems or improve the ones already in place (1997, p. 2).

## **B. PRELIMINARY STEPS**

Three preliminary steps should be taken prior to commencing the tasks of developing an outcome measurement process (Hatr and Kopczynski, 1997, p. 11-12).

1. Determine the scope of the program included in the measurement process. If there is more than one activity associated with the program then program managers must determine which activities will be included in the measurement process. Moreover, many programs contain activities that overlap with other programs. Managers should decide, prior to developing a measurement process, which overlapping programs will be included in their measurement processes
2. Secure top-level support for the outcome measurement effort. Strong commitment is necessary from senior level managers in order to insure adequate resources are committed to develop, implement, and operate the measurement process.
3. Establish a working group to oversee development of the process. The working group should include stakeholders from every aspect of the program. Along with the program manager, important stakeholders include:
  - a. Staff and other employees
  - b. Representatives from related programs
  - c. Technical Experts or outside consultants
  - d. Budget personnel
  - e. Program users

These preliminary steps ensure a strong foundation is constructed prior to building an outcome measurement process. Program managers should not omit these preliminary

steps because they provide the initial framework for the development and implementation processes.

### C. DEVELOPMENT AND IMPLEMENTATION STEPS

The following nine steps detail the necessary actions program managers must undertake and then use to develop and implement a successful outcome measurement system (Hatry and Kopczynski, 1997, p. 19-87).

1. Identify program mission/objectives and customers: The first step is precisely identifying the program mission, objectives, and customers. It begins with developing a mission statement that will serve as a starting point for identifying the outcomes to be measured and the specific performance indicators required. The mission statement should describe the overarching results the program is designed to achieve or the purpose of the program and have the following characteristics:
  - a. General statement of the major missions/purposes/objectives that the program is intended to achieve
  - b. The statement should not contain numerical targets. Such targets will be developed later in the development process.
  - c. All major objectives that the program hopes to achieve should be identified
  - d. The statement should include words that explicitly call for minimizing possible negative or unintended program effects.

Customers should be identified unless this is obvious. Questions that should be answered when identifying customers include: 1) who benefits from the program? and 2) who might be hurt by program activities?

2. Identify outcomes that should be monitored. All relevant outcomes should be listed. There are numerous sources that identify important outcomes and are often the same as the sources that identify program mission and objectives.
  - a. Legislation

- b. Mission statements
  - c. Strategic Plans
  - d. Direction from senior leadership
  - e. Direction from individual customers or focus groups
  - f. Individual employees or focus groups.
  - g. Complaint information
  - h. Other similar programs
  - i. Logic models or outcome sequencing charts.
3. Select outcome indicators: Program outcomes are not the same as outcome indicators. Every listed outcome should be translated into one or more outcome indicators that identify specifically what is to be measured. Outcome indicators identify specific numerical or qualitative value that indicates progress toward or away from achieving an outcome. Good quality indicators meet certain criteria:
- a. Relevance to mission and the outcome it is intended to measure.
  - b. Importance of what it measures. Does it measure some important aspect of the outcome?
  - c. The extent it is not duplicated by other indicators.
  - d. The extent that program has influence or control over the values of the outcome. Although programs cannot achieve complete control over an outcome, as long as the program is expected to ultimately have some tangible, measurable effect on the outcome, the indicator should be considered for inclusion.
  - e. Feasibility and cost of collecting indicator information. It should be noted that sometimes the most costly indicator provides the best quality data and should be retained.

- f. Indicators must include a numerical statement such as “percentage”, “incidence”, “proportion”, or “rate of”.
  - g. Level or ability of customers to provide relevant feedback relating to outcomes.
  - h. Wording of indicators must be specific. For example, a program that wants to increase the “number of teachers that have received significant professional development” will need to define specifically what is meant by “significant” in order to be able to measure the outcome indicator in a meaningful way.
4. Identify data sources and data collection procedures: The list of indicators is not complete unless data collection methods are included. Four major sources of educational outcome data include agency records, administered tests, customer surveys, and trained observer ratings. These four sources each have strengths and weaknesses when serving as data collection methods. Furthermore specific requirements to ensure each source is effective are listed.

Agency records are a good source of data due to their accessibility and low cost. Moreover, the procedures associated with record keeping are usually familiar to program personnel. However, modifications to existing record-collection processes may be required to obtain usable outcome data. Additionally, agency records alone seldom provide enough information on program quality or outcomes and, sometimes, record information may have to be merged with information derived from the records of other programs.

Student assessment through performance testing is a valuable source of outcome data. They are excellent indicators of program performance and outcome data. Moreover, grouped test data can be categorized by various breakout characteristics thus making the data more exploitable. Testing data should, however, be collected in a timely fashion so that program outcome is best represented by the data.

Customer surveys are an important source of data. Surveys of customers, systematically conducted, are a major way to obtain information on outcomes such as

behavior and satisfaction with program characteristics. This information often is unavailable from any other source. Moreover, surveys provide direct input from customers that add credibility to collected data. However, surveys are difficult to design and often expensive. Expertise is required when developing a survey instrument in order to ensure accuracy and relevancy of data gathered. Additionally, surveys are based on respondents' perceptions and memory. These weaknesses can cause data to be less convincing than other data source.

Surveys designed to collect data on outcome measurement should include questions relating to outcomes of services, amount of service that respondents used, diagnostic questions (why respondents gave particular answers), demographic questions, and requests for improving services.

Trained observer ratings can be used to measure outcomes observable by the physical senses. With this method personnel are trained to make qualitative ratings of program outcomes. This method can be applied in situations where the outcome can be measured by physical observation and can be rated on a scale that identifies variations in condition. These observations can have a high degree of accuracy and reliability if the rating system is clearly defined, adequate training of observers is conducted, and if procedures for periodic quality reviews are developed and implemented.

Like the other methods of data collection, there are advantages and disadvantages to this method. The advantages of trained observers include reasonably accurate rating of conditions that are otherwise difficult to measure, attaining data that can be used to allocate resources, and observer reports are usually easy to present and understand. Disadvantages include the labor intensive method, ratings require monitoring to ensure observers adhere to standards, and personnel may feel uncomfortable with the method.

Outcome indicators should not be considered final until data sources and data collection procedures are chosen. Data collection procedures can affect the specific outcome indicator used to measure a particular outcome. Program managers may consider using more than one procedure and thus more than one indicator to track important outcomes.

5. Select outcome indicator breakouts: Program data alone does not provide managers with usable information; intelligent program decisions cannot be made using raw data. Therefore, all data collected should be transformed before being used as a decision tool.

The first transformational step is disaggregation of data (or selecting breakouts). Breakouts permit comparisons among groups within a program. They also should be used to distinguish important groupings that have quite different outcomes from other groups. Therefore, outcome analysis should track the progress being made separately for each group to provide more meaningful information on what is happening within the program.

Programs should consider a number of categories when deciding what breakouts are most useful for its outcome indicators (Hatrav and Kopczynski, 1997, p. 53). Categories of breakout information include: organizational or unit objectives, customer characteristics, and type of process used to deliver the service. These categories enable program managers to separate data in order to identify where their programs are doing well and where they are not.

Separate outcome information on individual projects within larger programs can be quite useful. When data is collected from large programs managers of individual projects should have outcome information that pertains to that manager's own area of responsibility. Outcome data that lumps together outcomes from more than one project is not likely to be useful to managers of individual projects. Thus, program objectives should be identified prior to data collection so that breakouts can be more easily identified in the later process.

Breakouts by categories of customers can be very useful in providing information to program personnel about the extent to which particular categories of customer services are achieving the desired outcomes and for which categories desired outcomes are not being achieved. Categories in this breakout include: age, gender, race, household composition, etc. Using this information, breakout characteristics can be comprehensively tailored.

Relating outcomes to the type and magnitude of activities being supported by the program is likely to be of major interest to program managers. Thus, a program should consider breaking out outcome data by key characteristics of the projects being supported by the program. Such information can be very useful in distinguishing the more successful from less successful approaches.

Many programs have special characteristics of relevance to them that do not fall into one of the previous categories. Therefore, they should examine each of its outcome indicators to determine what breakouts would likely help them identify where the desired outcomes are successful and where they are not.

Breakout selection should start with a review of the categories listed and a review of outcome indicators to determine which apply to the program. Sub categories should be identified within each major category. For example, by what age level groupings should be measured? Under 20, over 25, between 17 and 22? Or should data be sought by individual ages? Which subgroups and how many will be sought will be determined in part by: data collection procedures, available resources, and required accuracy.

6. Compare findings to benchmarks: Benchmarks provide a means to determine if program outcomes are good or bad. This step identifies the types of comparisons (benchmarks) useful for programs. This step is a major one in a program's analysis of the findings from its outcome measurement data collection. Major types of comparisons include: Previous performance that may indicate improvement over time, performance of similar units that may provide benchmarking against the best, pre-selected targets, and outcomes among different client groups.

Comparisons against previous performance are the most common type of benchmark. Current performance should always be compared to that of previous reporting periods, regardless of the data collection cycle.

Programs that provide essentially the same service are likely to provide useful benchmarks to managers. Reporting such comparisons can also have motivational value to program personnel.

Breakouts by various customer demographics provide ideal benchmarking data. Comparisons should be made to indicate whether the program appears to be more or less successful with certain categories of customer/workload than with others such as males compared to females (Hatry and Kopczynski, 1997, p. 62).

Pre-selected targets (goals) are extremely useful benchmarks. They are cornerstones of the GPRA. Programs set targets and report achievement or non-achievement. Programs may want to use range targets rather than single values. For example if a target is expressed as a percentage, the target might be the range encompassing the target plus or minus five percentage points.

When an alteration of program delivery occurs outcome measurement can indicate the success of the alteration. This benchmark uses previous performance as a standard to measure new procedures. Outcome data can be used to track changes in outcomes from before the change to the outcomes after introduction of new practices.

7. Pilot test the procedures: New or substantially altered data collection procedures should be pilot tested prior to full implementation. This will identify and eliminate any problems with data collection procedures.

Testing should look for problems such as: unclear definitions, missing data, and confidentiality problems. Resolution of these problems can include procedure alteration, deletion of outcome indicator, or acceptance of diminished accuracy.

8. Analyze and report outcome information: Steps 5 and 6 discussed breakouts and comparisons for each outcome indicator. These choices of breakouts and comparisons will likely be the major focus of a program's analysis effort after it receives outcome information.

In each comparison developed in step 6, program staff should identify outcomes that indicate where the program has done considerably better or worse than anticipated. Furthermore, staff should attempt to identify why this occurred.

How programs report can be as important as what they report. There are numerous methods to report outcomes:

- a. Present actual outcomes to targets for both the last and current reporting periods.
- b. Present cumulative values for a year rather than previous reporting periods.
- c. Present responses from customer surveys with responses broken out by respondent characteristics.
- d. Other methods such as graphs, bar charts, timelines, and maps.

When outcomes are reported explanatory information should be included. Such information gives the program the opportunity to explain significant outcomes that were better or worse than expected.

9. Use outcome information: It is important to remind outcome information users that outcome data don not tell how much of the observed outcomes was caused by the program hand how much by other factors. Outcome information only conveys whether programs are meeting outcome objectives or not. The primary use of outcome information is to provide regular feedback to program personnel. There are various applications to the feedback of outcome information:

- a. Motivate personnel to improve.
- b. Track whether actions have led to improvements
- c. Identify where problems exist
- d. Communicate with and inform customers and the public about the extent to which progress is being made.
- e. Support long-range planning.
- f. Serve as baseline for targets and goals.
- g. Identify need for program personnel training.

## **D. CHAPTER SUMMARY**

This chapter reviewed Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement for the U.S. Department of Education. The guide provides

recommendations for development of an outcome measurement process for individual education related programs.

The first three steps are preliminary to process development. These preliminary steps are intended to gather high-level program support, determine the scope of the program to be measured, and establish a working group to oversee the development of the process. The guide then recommends nine process and implementation steps:

- Mission, objective, and customer identification.
- Identify outcomes to be monitored
- Select outcome indicators
- Identify data sources and data collection procedures
- Select outcome indicator breakouts
- Set benchmarks and compare findings to benchmarks.
- Pilot test data collection procedures
- Analyze and report outcome information
- Use outcome information

Outcome measurement processes developed using this guide provide program managers with information that will assist them in tracking the performance of their program and identify where improvements are required. Moreover, outcome information will assist managers in communicating with and informing customers and the public as to the success of education related programs.

The remaining chapters of this thesis will describe the research methodology, analysis, conclusions, and recommendations for the Naval Academy's Plebe Summer program performance measurement process using Hatry and Kopczynski's guide as a basis of analysis.

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## **IV. METHODOLOGY**

### **A. INTRODUCTION**

The purpose of this research is to analyze the performance measurement and outcome management procedures applied to the Plebe Summer program at the United States Naval Academy. The research methodology is divided into four areas. The first area consists of a thorough examination of current performance measurement and outcome management practices. The Government Performance and Results Act of 1993 forced United States governmental agencies to apply performance measurement practices in planning and managing their programs. The Naval Academy is part of the Department of Defense; therefore, it is subject to the GPRA. Due to the requirements of the GPRA investigation of current performance measurement and performance management is the logical first step.

The second area of research methodology consists of a thorough examination of the United States Naval Academy directives and military instructions governing the management of Plebe Summer. This area provides baseline information concerning the performance measurement mechanisms currently used by the Naval Academy. Moreover, this area also examines how midshipman performance is measured and recorded during and after Plebe Summer.

Gathering feedback from expert Naval Academy personnel is the third area of research methodology. In order to effectively identify the precise methods of Naval Academy performance measurement applied to Plebe Summer. Experts selected for this research included only personnel in key management positions accountable for determining the success of Plebe Summer.

The final research area uses Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement to evaluate the performance measurement and outcome management practices applied to the Plebe Summer program by the Naval Academy. This guide proposes nine development and implementation steps in creating an effective performance measurement system for educational programs.

## **B. RESEARCHING GENERAL PERFORMANCE MEASUREMENT**

Researching Plebe Summer performance measurement begins with an in-depth review of current performance measurement literature. This management tool has applications in both private and public sectors. Therefore, not all theories apply to the Academy's Plebe Summer program. An extensive literature review concentrates on current theories and best practices applicable to public sector programs. This review examined books, journal articles, internet articles, encyclopedias, and governmental agency reports. The following subjects concerning performance measurement are researched in order to identify how best to apply performance measurement to the Plebe Summer program:

- Goals and objectives of performance measurement are studied in order to confirm the Plebe Summer program is indeed an activity with which performance management is applicable.
- Performance Terminology is researched to provide a consistent vocabulary throughout the thesis.
- Best practices of performance measurement are researched to provide positive examples of public sector employment of performance management. This area identifies how public sector programs work to meet the demands of the Government Performance and Results act of 1993.
- Misuses of performance measurement are researched to identify areas where performance management is misapplied and could possibly lead to poor management decisions

## **C. RESEARCHING ACADEMY PERFORMANCE MEASURMENT**

Plebe Summer performance measurement procedures are derived directly from Naval Academy instructions governing Plebe Summer. Therefore, a detailed review of all instructions governing Plebe Summer is conducted. Moreover, because Plebe Summer instructions should support larger institutional goals a review of the Naval Academy strategic plan is conducted. Additionally, this strategic plan is reviewed to

provide information on the Academy leadership's attitude and goals concerning the full development of midshipmen.

Specific governing instructions for the Plebe Summer program are researched to identify the exact goals, objectives, procedures, and performance measurement of Plebe Summer. These instructions provide information concerning how Plebe Summer performance is recorded and examined in determining the level of success or failure of the program in meeting program objectives.

#### **D. EXPERT INTERVIEWS**

Expert interviews are conducted to identify the performance measurement procedures used by Naval Academy personnel responsible for planning, executing, and evaluating Plebe Summer. Furthermore, expert interviews are used to further elaborate the intentions of Naval Academy instructions and as well as identify the depth to which the instructions guide the performance measures of Plebe Summer.

Interviews are conducted with six experts that cover three levels of Plebe Summer program management. Three levels of management were selected to gain a thorough cross-sectional view of performance measurement practices. The three levels and related interviews are as follows:

- Commandant of Midshipman
- Officer In Charge of Plebe Summer Detail
- Assistant Officer In Charge of Summer Detail
- Company Officers (3)

Prior to conducting interviews, interviewees were provided a Pre-interview package. The package included a coversheet that introduced the purpose and intentions of the interview. Moreover, it provided the interviewees definitions of the performance measurement terms associated with this research. The purpose of providing this package to interviewees was to insure similar knowledge and understanding of the research model. The pre-interview package is shown in Appendix C.

A Plebe Summer Outcome Measurement Matrix was also included in the pre-interview package. This matrix provided interviewees a summary of the performance measurement practices defined in the Naval Academy's instructions governing the Plebe Summer program. The matrix is designed using the steps specified in Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement. Interviewees are asked to review the matrix while considering the following questions:

- In your opinion, does this list of objectives cover all the objectives of Plebe Summer? If not, please list additional objectives.
- In your opinion, what are the outcomes these objectives intended to achieve?
- What are the indicators of each outcome?
- How is data on each indicator collected?
- What is the benchmark for each indicator? What are the minimum acceptable levels of performance associated with each indicator?

The interviews were semi-structured and used open ended questions to give interviewees latitude in their answers. Questions were general and covered the following topics and theme:

- What, in your opinion, is the primary purpose of the Plebe Summer Program?
- What, in your opinion, are the goals and objectives of Plebe Summer?
- What outcomes are associated with each objective?
- How do you determine the success or failure of Plebe Summer in meeting its goals and objectives?
- What information do you use in determining the success or failure of Plebe Summer?
- Using the provided matrix please identify what, in your opinion, are the indicators of each outcome you believe are used to measure the success or failure of each goal or objective?

- What data do you collect and use for each outcome indicator?
- How is outcome data recorded and reported?
- What benchmarks do you use in order to evaluate the data collected?

## **E. OUTCOME MEASUREMENT EVALUATION**

The final research area uses Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement to evaluate performance measurement and management applied to Plebe Summer. The guide provides a mechanism to assess the effectiveness of the current outcome measurement process applied to the Plebe Summer program.

Information gathered from literature reviews and expert interviews are fused with the guide to provide a foundation for assessment. Specific Plebe Summer objectives, outcomes, outcome indicators, and breakouts listed in governing instructions and expert interviews are assessed using the guide. The purpose of the qualitative assessment is to determine the effectiveness of the Plebe Summer performance measurement and outcome management procedures.

## **F. CHAPTER SUMMARY**

This chapter described the methodology for this research. The research methodology consists of literature reviews, expert interviews, and analysis. First, a review of the current performance measurement and outcome management literature is conducted. Next a thorough review of Naval Academy instructions governing Plebe Summer follows. Interviews of six Plebe Summer experts are conducted to identify the performance measurement procedures used by personnel responsible for the planning and conduct of Plebe Summer. The following chapters will analyze the Plebe Summer performance measurement and outcome management procedures then provide conclusions, recommendations to the Naval Academy, and recommendations for further research.

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## V. DATA ANALYSIS

### A. INTRODUCTION

This chapter analyzes the data collected from the review of Naval Academy instructions and interviews of Plebe Summer experts. Each Plebe Summer objective is examined to evaluate the performance measurement and outcome management practices applied to Plebe Summer by the Naval Academy.

Developing program outcome information is a critical step in developing a high quality performance measurement system for programs and projects in the federal government. Good program management requires collection and use of outcome data to provide guidance for improvement. Without information on results, managers can only supervise “inputs” or monitor processes. Decisions on whether the program is actually working well – or what need changing – are made in the absence of hard data on actual outcomes (Hatr y and Kopczynski, 1997, p.1).

This analysis determines whether Naval Academy employs performance measurement and outcome management practices effectively to achieve Plebe Summer objectives.

The Guide to Program Outcome Measurement consists of nine process and implementation steps and is intended to be a tool used by managers and their staffs in building reasonably valid and reliable outcome monitoring procedures. Evaluating the outcome management procedures applied to Plebe Summer divides these nine steps into two areas. First, this evaluation begins by identifying the objectives of Plebe Summer. This establishes a foundation to answer the question, “What is successful performance of Plebe Summer?” (Hatr y and Kopczynski, 1997, p.1)

The second step is to evaluate the current Naval Academy performance measurement and outcome management procedures for each identified objective. Plebe Summer objectives are subsequently evaluated independently using the following criteria:

- Outcomes (O). Are specific outcomes for each objective identified? Do outcomes cover each element of the objective statement?

- Outcome Indicators (OI). Are outcome indicators that specifically identify what is to be measured identified? Do indicators 1) measure an important aspect of the outcome, 2) overlap with other indicators, 3) cover all outcomes, and 4) provide relevant feedback? Are indicators controllable by the program?
- Data collection (DC). Are reasonable data sources available? Are data collection procedures for each indicator identified? Does data collected allow for comparison?
- Benchmarks (BM). Are benchmarks that provide the ability to assess the successful accomplishment of each objective identified?

To be characterized as effective the performance measurement procedures and outcome management procedures of each objective must meet these criteria.

## **B. PLEBE SUMMER OBJECTIVES**

The first step in developing an outcome monitoring process is to prepare a mission/objectives statement for the program. This identifies what overarching results are hoped to be achieved or the purpose toward which the program is directed (Hatrav and Kopczynski, 1997, p.17). Identifying program objectives is the starting point for identifying outcomes and performance to be measured later.

The basic form an objective statement should include both a “To” statement and a “By” statement. The “To” statement identifies the basic objectives the program seeks. The “By” statement identifies the method by which the objectives are accomplished (Hatrav and Kopczynski, 1997, p.18).

Plebe Summer is managed using the following military instruction: Fourth Class Indoctrination (Plebe Summer) COMDTMIDINST 1510.2B (USNA, 2001b). This instruction lists three Plebe Summer objectives:

- Effect the transition from civilian or enlisted to officer candidate status.

- Indoctrinate and train midshipmen in proper military discipline, courtesy, requirements and traits of special trust and confidence, teamwork, and personal accountability.
- Provide basic training in seamanship, marksmanship, military drill, watch standing, and customs and traditions of the Naval service (USNA, 2001b, p. 6).

Expert interviews identified one additional Plebe Summer objective not identified in Naval Academy instructions:

- Prepare the Plebe class for integration/incorporation into the Brigade of Midshipmen and the challenge of Plebe academic year.

Although this last objective is not addressed by Naval Academy instruction it was a universal theme among interviewees. Commander Patricia Cole, USN expressed this objective saying:

To prepare the incoming class with the rudimentary knowledge and skills so that they are equipped and prepared to be incorporated into the Brigade of Midshipmen. They are in an indoctrination process that goes throughout the entire year and this is just a part of it. Plebe summer is to get them into physical conditioning and teach them the basic military skills and knowledge about the Naval Academy and their responsibilities and expectations. (Personal Communication, April 2002)

The Commandant of Midshipmen, Colonel John Allen, USMC amplified this idea saying:

In a very real sense the focused purpose of Plebe Summer is, through an environment of imposed discipline, to transition them from individual priorities to collective and small unit priorities associated with institutional excellence as a member of the fourth-class regiment. And, then have them transition out of the fourth-class regiment and into the Brigade of Midshipmen. (Personal Communication, April 2002)

These four objectives provide adequate “To” statements. However, the Naval Academy instructions governing Plebe Summer do not contain a “By” statement. The instruction that governs Plebe Summer provides limited clarity on how objectives are to

be met when it defines the scope of Plebe Summer. This definition provides nebulous direction to the methods employed by Plebe Summer:

Plebe training encompasses progressive, demanding training in those subjects required to produce midshipmen who function effectively in the brigade, are trained in drill, are physically fit, and practice those personal and professional traits which distinguish them as midshipmen at the United States Naval Academy (2001b, p. 6).

This scope declaration is vague and incomplete. It does not define the terms, “progressive” and “demanding” or define what “personal traits” distinguish plebes as midshipmen. The “By” statement should lead management personnel to exactly what should be measured by the performance measurement system. However, in the case of Plebe Summer, no clear guidance is provided. The absence of a clear and direct statement associated with each objective leads to misinterpretation of the objectives of Plebe Summer. This misinterpretation was expressed by Naval Academy experts when they discussed the objectives of Plebe Summer:

- There are all kinds of factors that I’m not sure we, as an institution, have properly or accurately articulated (Colonel John Allen, USMC, Personal Communication, April 2002)
- There is a sense that plebe summer without a high attrition rate wasn’t really a Plebe Summer. There is the sense that Plebe Summer is a stand-alone event, an experience. None of that is right. There will be some attrition during Plebe Summer, but the intent of Plebe Summer is not attrition. (Colonel Allen, Personal Communication, April 2002)
- During Plebe Summer, I think there is a misconception by some of the detailers that they are preparing the plebes for battle, preparing them for war, or trying to train them to be these people who finish plebe summer and get immediately flown over to combat terrorism. Which isn’t the case. (Captain Tyrel Moxey, USMC, Personal Communication, April 2002)

A complete mission/objective statement is important in developing a valuable performance measurement and outcome management system. It is the starting point for identifying the outcomes to be measured and the specific performance indicators that are

needed (Hatrav and Kopczynski, 1997, p. 17). The absence of a “By” statements for these four objectives forces Academy personnel to develop ad hoc performance indicators.

Notwithstanding the lack of a “By” statement these four objectives provide a foundation for analyzing Plebe Summer performance measurement and outcome management procedures. Each address one aspect of the purpose toward which Plebe Summer is directed. Although there is no “By” statement associated with the objectives, the objectives do expose the ends toward which Plebe Summer is designed to achieve.

### **C. OUTCOME ANALYSIS**

The remainder of this chapter evaluates the performance measurement and outcome management procedures for each of the above four objectives. The following criteria are used in assessing the Plebe Summer performance measurement procedures identified during the literature review and expert interviews: outcome identification, outcome indicators, data collection procedures, and benchmarks. The outcome and performance measurement procedures should assist Plebe Summer leaders in focusing on results, not just work activities.

There is a hierarchical pattern to the four listed objectives. The first objective is focused on the cultural indoctrination of plebes. The second objective is focused on furnishing plebes with the tools to be successful within the Academy’s unique culture. The third objective is intended to provide plebes with necessary skills. Finally, the last objective is intended to insure plebes are prepared apply these tools and skills as they enter the Brigade of Midshipmen. Thus, the hierarchy of objectives applied to Plebe Summer can be listed as culture, tools, skills, and application.

#### **1. Civilian To Enlisted Transition**

The first objective evaluated is the transition from civilian and enlisted to officer candidate status. This objective is focused on immersing plebes in the Academy’s culture and inculcating plebes with the cultural norms. Table 1, the Civilian to Officer Candidate Transition worksheet displays the results of the analysis. Along the top criteria categories are listed. Then, each row defines an outcome, lists outcome indicators, states whether the criteria are met, or indicates whether the measurement procedures for that outcome

indicator are effective. First the outcomes are evaluated; then each criterion is evaluated and explained in detail.

*a.      Outcome Identification*

This objective is very weakly defined. Although the objective seems clear and concise at first glance, it contains no definition of “officer candidate status”. Naval Academy experts agree that, to them, this objective is linked to a cultural indoctrination process that occurs during Plebe Summer. Captain Paul Funk, USMC, described the focus of this cultural indoctrination process:

To instill in this incoming plebe, this civilian, a heightened sense of and awareness to duty. It's hard to quantify. To install a shared set of values among the plebes that are embraced by the brigade. Duty, honor, courage, commitment, ship-shipmate-self. To guide that transition and it's changes. Then you see the plebes actually embrace them and understand them. (Personal communication, April 2002)

Lieutenant Colonel Joseph Dauplaise, USMC, Plebe Summer Officer-in-Charge, supports this statement:

We are taking a raw recruit right out of high school that has an academic and physical background and no known character flaws and bring them into this culture. We now have to transition them. We have to break them into a routine where you get up early and stay up late. So, we are breaking the civilian out of them and putting the military spin on them. (Personal communication, April 2002)

There is no Naval Academy instruction that defines a specific outcome to be measured for this objective. However, academy experts reported that an outcome (O) associated with this objective as: increased military performance during Plebe Summer. This outcome includes professional military, physical, and academic aspects of plebe performance.

This outcome successfully encompasses the entire cultural basis of midshipmen by focusing on all three aspects: professional military, physical, and academic performance. Midshipmen are college students pursuing an academic degree while simultaneously living within a military culture that includes values, dress code, military courtesy, vocabulary, and personal discipline. The combination of these aspects creates conditions somewhat uncommon among other educational institutions and is

important when addressing the cultural indoctrination of plebes. In the absence of direction provided by governing instruction, “increased military performance during Plebe Summer” is a suitable outcome for analyzing this objective.

Table 1. Civilian to Officer Candidate Transition Worksheet

Outcome	OIs	Data Collection Procedures	Benchmark	Effective/ Non Effective
1. Increased Military Performance during Plebe Summer	1. Military Performance 2. Rate Knowledge 3. PRT Scores 4. Time MGT Skill 5. Conduct/Honor	1. Y 2. Y 3. Y 4. N 5. Y	1. N (Individual only) 2. N (Individual only) 3. N (Individual only) 4. None 5. None	1. NE 2. NE 3. NE 4. NE 5. NE

### *b. Outcome Indicators*

Specific outcome indicators (OIs) for this objective that support performance measurement of Plebe Summer are not listed by Naval Academy instructions. However, Naval Academy experts list OIs they apply to this outcome:

- Percent receiving passing military fitness report grades during Plebe Summer
- Percentage passing Physical Readiness Test (PRT) during Plebe Summer
- Percentage passing rate knowledge quizzes during Plebe Summer
- Incidence of demonstrated poor time management skills during Plebe Summer
- Incidence of conduct or honor infractions during Plebe Summer
- Rate of attrition during Plebe Summer

Each of these indicators measures important aspects of the outcome. Fitness report grades provide an accurate description of midshipmen performance

(USNA, 2001b, p. 5-25). Rate knowledge quizzes are designed to measure plebe understanding of “their individual responsibility to further his/her training and professional development and to facilitate the smooth and efficient operation of the organization itself” (USNA, 2001b, p. 2-3). Moreover, fitrep grades directly represent the level to which individual plebes perform professionally. PRT scores are important due to the physical requirements placed on midshipmen. All midshipmen are subjected to a demanding schedule that requires excellent time management skills. Midshipmen are expected to act and conduct themselves as public figures. Therefore, incidence of honor and conduct offenses are used to indicate the level to which midshipmen meet this requirement. Finally, the attrition rate is keenly scrutinized because it indicates the level of plebe success in making the transition into the Academy’s culture.

These OIs overlap in some instances. Due to the demanding schedules to which midshipmen are subjected rating and professional grades can be, in some instances, due to poor time management skills. Attrition can be affected by conduct or honor offenses.

Each indicator provides relevant feedback to Plebes and Naval Academy leaders on the success of meeting this objective. More importantly, most of these indicators are very easy to understand and apply. Problems developing time management skills are more difficult to identify due to many ways poor time management manifests itself. However, when time management is identified as a source of difficulty for the plebe, the resultant feedback is extremely relevant and useful. Attrition rates significantly higher than average indicates, to Academy leadership, that the plebe class is having difficulty adjusting.

Programs should have some control over outcome indicators for the indicators to be valid. However, this criterion should not be over-valued. As long as the program is expected to ultimately have some tangible measurable effect on the outcome, it should be included (Haty and Kopczynski, 1997, p.31). Plebe Summer is successful in providing some measure of control over each indicator. Plebe Summer experts agreed that successful introduction to academy culture results in higher performance grades both academic and military. Also, PRT grades rise due to the demanding physical

requirements of the Plebe Summer curriculum. Additionally, Plebe Summer experts maintain that time management, honor, and conduct problems decrease as plebes accept the tenets of personal discipline that are also an integral part of the Plebe Summer curriculum (Capt Tyrel Moxey USMC, Personal Communication, April 2002; Colonel John Allen, USMC, Personal Communication, April 2002; Lieutenant Joseph Deauplais, USMC, Personal Communication, April 2002).

*c. Data Collection Methods*

Plebe Summer instructions do not stipulate specific data collection procedures in support of performance measurement. However, data is collected for each OI with the exception of time management skills. Again, time management skills are difficult to quantify and measure due to the many ways poor time management manifests itself.

Fitrep grades are assigned by the squad leaders twice during the summer. They are then approved by the Company Officer (USNA, 2001b, p. 5-25). However, no comprehensive procedures are defined that would allow class-wide collection of this data. PRT scores, conduct/honor issues, and attrition rates are reported and recorded into the Midshipman Information Data System. This database is easily accessible to every academy leader. Moreover, the information is consistently recorded every academic semester. Therefore, there is no missing data when evaluating the entire class or individuals within the class.

Plebe Summer grades, including fitrep information, inspection results and rate knowledge are established and recorded by midshipmen squad leaders. Squad leaders record both positive and negative aspects of performance in their Squad Leader's Notebooks using the Plebe Evaluation Record sheet. The purpose of this record sheet is to record any item considered significant in the plebe's development. Items recorded include personal appearance, military bearing, attitude, professional knowledge, self-confidence, physical performance, watch standing, drill performance, uniform and room appearance. Criteria are graded by the squad leader as below average, average, or above average. The importance of squad leader data collection was articulated by Captain Moxey, USMC:

We made sure that the squad leaders were writing everything down. Each squad leader had a binder so there was a binder for all the plebes and the record of counseling were put in respective plebe's binder. Whatever it may be, good, bad, or indifferent counseling. The counseling that needed to be done on a periodic basis was put in there. On the spot counseling that was both positive and negative was put in there. Anything. We highly encouraged them to put it down. Because we continually impress upon them, "if you don't write it down it didn't happen." You can say, "This person continually can't do whatever, but if you don't write it down nobody knows it and it's gone."

So, we collected that information so that when we went through and basically had to say, "these plebes get A's and these plebes get B's, and so on" we had information to go on. Now, was it hard numbers? Did we have a point scale? No. It was this person has three or four great counseling on demeanor and discipline and punctuality. And this one here has been constantly corrected for dirty room, messed up uniform, there's lots of documentation here, so who gets the A and whatever. It becomes pretty obvious (Personal Communication, April 2002).

The information recorded by squad leaders is not shared class-wide. Therefore, there is no method to assemble information concerning entire class performance into a single database that affords comparison class-wide. Moreover, comparison against previous performance or pre-determined targets is impossible.

***d. Benchmarks***

No minimum standards or targets are assigned on a program-wide basis. Fitrep grades have minimum passing standards on an individual basis based on an A thru F (4.0) scale with minimum "C" grade for passing. They indicate individual performance and comparison against previous classes or predetermined targets is impossible.

PRT grades are also based on an A thru F (4.0) scale with minimum "C" grade for passing. PRT grades are established using a 300-point system with minimum performance levels defined for each of the three physical tests (pushups, sit-ups, and 1.5 mile run) each worth 100 points. These grades are easily summarized and can be used to compare with previous plebe classes, pre-selected targets, or different program practices (such as differing physical development techniques). However, no minimum class-wide benchmarks are set down for comparison.

Attrition rates also have no minimum or maximum targets. However, occurrence rates can easily be summarized and compared with previous plebe classes. The same applies for the incidence of conduct and honor offenses. Although no minimum standard is set, the data collected can also be compared to previous classes. All conduct and honor offenses are adjudicated and remediated within a short period after infraction on a case-by-case basis according to military guidelines. If an explanation or training deficiency is identified as a contributing factor to the offense, remediation is arranged to assist midshipman development. There are no benchmark criteria for measuring incidence of poor time management skills.

*e. Conclusion*

The performance measurement and outcome management procedures associated with the civilian or enlisted to officer candidate transition are not effective. There are no specific performance measurement procedures defined through Plebe Summer instruction. However, academy experts detailed an outcome as well as a number of outcome indicators and data collection procedures they use in ad hoc fashion to measure the success of this outcome.

The absence of a definition of “officer candidate status” limits Academy personnel’s ability to accurately measure the success of this objective. Until definitions are identified and specific procedures are established academy personnel will continue to use ad hoc measures of performance.

Although individual performance benchmarks are identified for each outcome indicator there are no minimum benchmarks to compare the class-wide success. Therefore, Plebe Summer leadership cannot accurately assess the level of success the program has in effecting the civilian to officer candidate transition.

**2. Indoctrinate and Train Midshipmen**

The second objective is intended to provide plebes with a number of tools they will employ as midshipmen within the academy’s culture. The objective states five areas that midshipmen receive indoctrination and training: 1) military discipline, 2) military courtesy, 3) requirements and traits of special trust and confidence, 4) teamwork, and 5)

personal accountability. This objective builds upon the first in that it is intended to provide plebes with the tools to effectively survive in the Academy's military culture. Table 2, Plebe Indoctrination and Training Worksheet displays the results of analysis.

*a. Outcome Identification*

There is no specific outcome established for this objective. Moreover, the objective is poorly worded and ambiguous. The terms included in this objective (discipline, courtesy, team work, special trust and confidence) are not defined. This forces Plebe Summer experts to develop ad hoc definitions and performance metrics in order to measure the success of this objective. The Plebe Summer experts identify that the desired outcome of Plebe Summer associated with this objective is: plebes learn and demonstrate military professionalism and personal discipline.

Table 2. Plebe Indoctrination and Training Worksheet

Outcome	OIs	Data Collection Procedures	Benchmark	Effective/ Non Effective
1. Learn and Demonstrate Military Professionalism and Personal Discipline	1. Conduct/Honor 2. Personal Observations 3. Inspection Results 4. Rate Quiz results	1. Y 2. Y 3. Y 4. N	1. N (Individual only) 2. N (Individual only) 3. N (Individual only) 4. None	1. NE 2. NE 3. NE 4. NE

This outcome focuses exclusively on professional military aspects of plebe development as discussed by Commander Patricia Cole, USN:

What I would look for is, as far as the training, do they seem to be handling their responsibilities well? Do they know where they are supposed to be? Do they know how to correctly wear a uniform? Do they know how to address people who are senior to them? Do they know how to use the chain-of-command? Basic military things. (Personal communication, April 2002)

Although no specific outcome is listed Plebe Summer instruction this objective will be analyzed using the above outcome obtained from Academy experts.

**b.      *Outcome Indicators***

Plebe Summer experts listed various indicators associated with this outcome. Included in the list are:

- Low number of conduct or honor infractions
- Incidence of outstanding scores on uniform and room inspections
- Incidence of professionalism observed by senior personnel
- Percentage passing rate knowledge quizzes during Plebe Summer

These indicators focus specifically on military performance and the demonstration of professional military ideals. Although Plebe Summer instructions do not specify these indicators as metrics for this objective, they will be used for this analysis.

Each OI measures an important aspect of the outcome. Conduct and honor offenses indicate understanding and acceptance of the military culture to which plebes are being introduced. Moreover, low incidence levels of conduct and honor infractions indicate high levels of personal discipline among the plebes. Room and uniform inspection results are indicators of plebe attention to detail and motivation towards maintaining high personal standards. Demonstrated professionalism such as proper courtesy toward senior personnel indicates comprehension of the professional training plebes receive as well as personal discipline. Finally, high performance on rate quizzes indicates plebe understanding of their personal responsibility to self-improvement and professional education.

There is overlap present among these OIs. Conduct/honor offenses are incorporated into military performance grades. Therefore, these indicators are duplicated when measuring the outcome of this objective. Also, senior personnel such as company officers and senior enlisted advisors have input to military performance grades. In this situation, their personal reflections are recorded twice.

Each indicator listed provides relevant feedback. Furthermore, they are easy to understand. High rates of conduct and honor offenses quickly indicate problems with plebe professionalism and a high incident rate among the entire class could indicate

poor training of expectations. Inspection results, rate quiz results, and personal observations also provide the same quick indication of plebe professionalism and motivation.

Plebe Summer training provides plebes with training and tools necessary to conduct themselves professionally within the academy culture. Although Plebe Summer training cannot control conduct or honor offenses it does define for plebes acceptable behavior and addresses the conduct expectations of each midshipmen. Therefore, Plebe Summer does maintain some control over these outcome indicators.

*c. Data Collection Methods*

Plebe military performance is observed and recorded by their squad leader in the same fashion describe in the first objective analysis. Squad leaders record both positive and negative aspects of performance using the Plebe Evaluation Record sheet. Conduct offenses are also recoded (USNA, 2001b, p. 71). These records are used as a tool when squad leaders provide performance counseling to plebes. However, the records of individual plebe performance are not collected for use outside the company.

Inspection grades and rate quiz performance are also determined and recorded by squad leaders. Plebe performance on inspections and rate knowledge quizzes is recorded by squad leaders using the Plebe Evaluation Record sheet. These reports are not consolidated class-wide using a centralized database. Therefore, these data are not easily summarized and used by senior personnel. Moreover, individual and company average inspection performance is not recorded or tracked outside the company level.

Incidence of professionalism observed by senior personnel are not recorded or tracked by anyone other than that person making the observation. No central data collection or recording is done with this information.

No data are collected on “teamwork”. Moreover, Plebe Summer experts do not indicate understanding on how teamwork could be measured:

Training “teamwork”? I don’t know, is there a metric for that? Is there a written test? There wasn’t for my company and I don’t know if you could create one (Captain Tyrel Moxey, USMC, Personal Communication, April 2002)

An easy performance tool is knowledge and certain other standards like PRT scores. The harder to quantify ones are performance related such as “teamwork”. Or, a person’s bearing, how well they hold themselves. How well they react to detailers. Heck, it’s even hard to quantify if somebody understands teamwork or not. It’s a small thing, but how do you look at someone and give them a grade on teamwork? You can’t. (Captain Paul Funk, USMC, Personal Communication, April 2002)

Although teamwork can be demonstrated it is more difficult to quantify and compare among a group.

*d. Benchmarks*

Benchmarks that allow data comparisons are not defined. Plebe summer leadership use improvised methods to determine success in meeting this objective. Plebes are ranked using the squad leader evaluation records; however, this ranking is kept in-company, and no comparison among other companies is conducted.

Fitrep grades, rate knowledge quiz performance, and inspection results have no minimum allowable standard. Rather, problems are identified and plebes receive immediate feedback on how to correct deficiencies. A further problem with inspections is that inspection criteria are not standardized resulting in no two plebes receiving the same level of scrutiny. Conduct and honor offenses are recorded in the MIDS database. This database provides easy access to Academy leadership.

*e. Conclusion*

The performance measurement procedures associated with this objective deal specifically with individual performance and not program evaluation. Therefore, the performance measurement of indoctrinating and training plebes in military discipline, military courtesy, requirements and traits of special trust and confidence, teamwork and personal accountability is not effective. Teamwork data are not collected due to the complex nature of the subject matter. Moreover, data collection methods for the other OIs do not gather information on a class-wide basis in order to afford comparison with previous performance or targets.

Plebe summer personnel could not effectively measure the success of this objective even if class-wide data was available. This is due to the complete lack of

benchmarks for data comparison. Although individual performance benchmarks are identified, they do not assist in assessing objective success.

### **3. Provide Basic Training**

The third defined objective of Plebe Summer is to provide plebes with basic training in various military subjects including: seamanship, marksmanship, military drill, watch standing, and customs and traditions of the Naval Service. This objective is designed to develop within plebes a skill set that will enhance their success at the Naval Academy and in the fleet as Naval officers.

#### **a. *Outcome Identification***

No outcome for this objective is defined through Academy instruction. The Commandant of Midshipmen, however, articulates the intent of this objective:

Do midshipmen at the Naval Academy need to shoot weapons? The answer is no, they don't need to shoot weapons. But do we produce a better midshipman and ultimately a better officer if they've had the opportunity to go through the process of learning the techniques and procedures associated with the surgical application of marksmanship? The answer to that question is yes. Not because they will ever have to fire that weapon again. But I contend that an officer of the Naval service, regardless of warfare specialty he or she serves in, is a more confident officer, is an officer who feels better about their own role in this profession of arms if they have some sense of their ability to handle weapons.

In conjunction with the martial arts program we're creating this gives them a sense that weapons handling, whether you're standing on the bridge of a ship, staring down a periscope, flying a fighter, or leading a rifle platoon, weapons handling is part-in-parcel with the profession of arms.

It's just good for your self-confidence. So, that's why we do basic marksmanship. Basic drill, of course, is basic teamwork and immediate obedience to orders. Basic drill, close-order drill is part-in-parcel with any early regimentation and any self-imposed discipline. (Personal communication, April 2002)

Plebe Summer experts identified the outcome they associate with this objective as: plebes are equipped with the skills to succeed within the academy's culture. Plebes draw on the tools acquired in previous training in order to meet professional challenges of watch standing, seamanship, marksmanship, and military drill. Through

instruction in the customs and traditions of the Naval service plebes learn the context in which they apply these skills.

Although no outcome is defined through Plebe Summer instruction the outcome identified by the Commandant of Midshipman will be used for analysis. Table 3, Basic Training Worksheet, displays the results of this analysis.

Table 3. Basic Training Worksheet

Outcome	Outcome Indicators	Effective Data Collection Procedures	Effective Benchmarks	Effective/ Non Effective
1. Plebes are Equipped with Skills Required at USNA	1. Percent passing academic exams 2. Percent Receiving sailing qualification 3. Percent receiving weapons qualifications 4. Percent of Companies receiving excellent drill scores	1. N 2. N 3. N 4. N	1. N (Individual only) 2. N (Individual only) 3. N (Individual only) 4. N (Company only)	1. NE 2. NE 3. NE 4. NE

***b. Outcome Indicators***

Outcome indicators used as metrics for this outcome measure skill level and subject understanding. Indicators currently used to measure success of this outcome include:

- Percent receiving passing marks on professional instruction in Damage Control, Visual Signaling.
- Percent earning sailing “B” qualification
- Percent receiving expert marksmanship scores
- Percent receiving excellent military drill scores

The indicators measure only the practical application and understanding of instruction. The information obtained through these indicators does not provide feedback in the context of naval customs and tradition.

The indicators measure important aspects of the desired outcome. The following paragraphs detail the professional curriculum as well as the curriculum objectives described in this objective. Moreover, each subject description will list the skills and knowledge measured by these indicators as well as their practical application within the Academy's culture.

Damage control is a basic skill of all sailors. The ability to fight casualties onboard a ship is the foremost challenge of new personnel. Demonstrated proficiency in casualty and damage control is a hallmark of professional naval officers. Through developing expertise in damage assessment and casualty combat plebes develop and gain confidence in the use of personal decision-making skills. The damage control curriculum plebes receive includes fire-fighting techniques, flood control, damage control equipment and its applications. Plebes also receive hands-on experience plugging and patching piping, donning emergency breathing devices, using fire extinguishers, and using the Navy all-purpose nozzle and fire hose (USNA, 2001a, p.35).

Naval ships employ visual communications regularly. Midshipmen are expected to attain the ability to encode and decode visual signals rapidly. This professional skill can be directly applied to fleet demands and achieving visual communications proficiency provides plebes with greater understanding of the demands placed on operational naval units. The visual communications curriculum includes lessons on the importance and use of visual communications, communications organization format, and signaling responsibilities. Plebes receive hands-on training with Morse code and Flag hoist signaling (USNA, 2001a, p.37).

Ship control is the fundamental skill of a naval officer. Regardless of warfare specialty, these lessons promote the development of skills such as foresight, planning, tenacity, flexibility, and diligence. It matters little whether plebes eventually apply these lessons to ships, planes, or rifle platoons; what matters is the development of fundamental skills to apply in an environment that is constantly changing to produce varying challenges. Proficiency in this subject provides plebes with confidence in their ability to work within a constantly changing environment. The sailing curriculum includes

lessons in basic seamanship, sailing procedures, sailing equipment, emergencies, and sailing practical (USNA, 2001a, p.36).

The value of marksmanship training was expressed previously. These lessons provide plebes with self-confidence and understanding of their roles within a military profession. The curriculum includes training in weapon care and safety, firing procedures, and live-fire qualification. Midshipmen who score high on marksmanship testing qualify for ribbons worn on the uniform. There are three levels of qualification for both the M-16 rifle and the 9mm pistol are, expert (E), sharpshooter (S), and basic ribbon qualification (USNA, 2001a, p.41).

Military drill introduces plebes to teamwork and self-discipline. Lessons within this subject enlighten plebes to their role within a military environment. Moreover, military drill trains midshipmen in the skills of teamwork and obedience to military orders.

The OIs for this objective do not overlap with one another and are controllable by the Plebe Summer program. Each subject is tested separately and the indicators provide relevant feedback to both Academy leadership and plebes. Successful completion of each examination and practical test indicates understanding of the curriculum concepts and demonstrates the requisite skills required for later plebe success.

*c. Data Collection Methods*

There are no data collection procedures for this objective. Although there are grades associated with the Damage Control, Visual Signals, and Sailing exams, the performance of individual plebes is neither recorded nor tracked on a class-wide basis. In the area of weapons training, midshipmen who qualify for a ribbon have the qualification noted in their military record. However, the rate of qualification among the plebe class is not recorded. The same is true for sailing “B” qualification. Each plebe successfully qualifying has it noted in their military record. However, the rate of qualification among the entire class is not recorded.

Drill performance is recorded on a company level only and no historical data is collected. Therefore, class performance cannot be compared. Also, drill is graded

on a company wide basis only. This is problematic in view of the fact individual plebe performance cannot be differentiated from the company's. Poor drill performance on an individual basis is not recorded resulting in difficulties identifying and remediating low performers.

***d. Benchmarks***

There are no benchmarks defined by Naval Academy instruction that allows for comparison among groups or previous classes. Plebe summer personnel could not effectively measure the success of this objective even class-wide data was available. This is due to the complete lack of benchmarks for data comparison. Although individual performance benchmarks are identified, they do not assist in assessing objective success.

***e. Conclusion***

The performance measurement and outcome management procedures for this objective are not effective. No procedures for measuring class-wide performance are detailed by Academy instruction. This forces academy personnel to develop individual performance measures to apply on an individual basis.

Although the desired outcome and outcome indicators are clearly defined by Plebe Summer experts, they are unable to identify clear data collection methods or benchmarks that adequately conclude the success or failure in meeting this objective. Moreover, data collection methods and benchmarks used by Plebe Summer experts all measure individual or company-wide performance and are not amassed to provide class-wide comparison with previous performance or pre-selected targets.

**4. Prepare Plebe Class For Integration Into The Brigade of Midshipmen**

The last objective is not defined by Naval Academy instruction. However, it was universally identified by Plebe Summer experts and was defined as: preparing the plebe class for integration/incorporation into the Brigade of Midshipmen. This objective ties the previous three objectives together in that it is focused on teaching the plebe class how to apply the previously analyzed tools and skills within the Naval Academy and military culture. One expert described this objective:

I would say the things that plebes learn to make them good plebes are the same things that will make them good midshipmen and good naval officers. They are not separate. The aspects of punctuality, being able to prioritize, of being able to press on when tired, hungry, and worn out. All these qualities we try to impart during plebe summer and see how they do with the struggles. Some rise to the challenge, others do not perform as well. Nevertheless, those same traits that exude during plebe summer are the same that third-class midshipmen, second-class midshipmen, and firsties are all tested on and expect in plebes. And they are one in the same to those that make a great naval officer (Personal Communication, Capt Tyrel Moxey, April 2002).

Another expert described this objective more directly:

Under the heightened supervision of Plebe Summer and heightened intensity of Plebe Summer we take plebes and turn them into a product that we can place into the academic year under less supervision and let the brigade finish the training. Because that is where the majority of training is going to take place (Personal Communication, Capt Paul Funk, April 2002)

The Commandant of Midshipmen underscores the importance of this objective and the importance of the transition from Plebe Summer to the academic year:

Now, the institution here has not done a very good job. Has not done a very good job of explaining the seam , the S-E-A-M, between Plebe Summer and the formation of the brigade. As well, we have not done a very good job as an institution of picking up the momentum of the plebe development, the fourth-class development, the professional, moral, mental, and physical that occurs during Plebe Summer and have that momentum continue in the academic year (Personal Communication, Colonel John Allen, April 2002).

The foundation of this objective is that the professional development of plebes does not stop upon completion of Plebe Summer. Rather, it continues throughout the fourth-class academic year where the degree of supervision and control placed upon plebes is greatly reduced. With this in mind, Plebe Summer must inculcate each plebe with methods and strategies to effectively apply the tools and skills learned during plebe summer in order to be successful during the academic year.

*a.      Outcome Identification and Analysis*

The outcome associated with this objective is: plebe development continues during the academic year. This outcome is based on the proper application of the tools and skills learned in Plebe Summer.

I typically do not look at Plebe Summer in isolation. Because, if we've done it right, Plebe Summer simply prepares the fourth-classmen to join the brigade where the preponderance of training continues. Plebe Summer simply, through the mechanism of imposed discipline and the stressors and strains of a schedule that they can never meet, provides them the context and the early military skills and qualities necessary to function properly within the brigade (Personal Communication, Colonel John Allen, April 2002).

At first glance, this outcome seemingly duplicates the outcome described for the first objective. This last objective may seem as though it is an extended enculturation process. However, while two outcomes are closely related and rely on similar outcome indicators and benchmarks there are distinct differences between the two. The first outcome is intended to improve plebe performance as a function of successful enculturation during Plebe Summer. Moreover, the first objective measures success within the timeline of Plebe Summer. However, this fourth outcome addresses continued plebe development upon the conclusion of Plebe Summer as a function of the application of skills and tools attained during plebe summer. Also, the outcome indicators, data collection, and benchmark comparisons associated with this last objective all take place after plebe summer concludes. The results of analysis for this objective is presented in Table 4, Transition to Brigade Preparation Worksheet.

*b.      Outcome Indicator Analysis*

The OIs listed for this objective measure the professional success of midshipmen during the academic year.

- Percent receiving passing academic grades and overall class GPA
- Percent receiving passing academic year military performance grades and overall MQPR
- Attrition rate during the academic year

- Incidence of conduct or honor offences during academic year
- Proportion of class passing PRT during academic year

These OIs each measure an important aspect of the outcome. Superior grades in academics, professional military performance, and PRT indicate plebes competence in applying time management and other skills required for success at the academy. Moreover, military performance grades measure the day-to-day application of the professional training plebes received during Plebe Summer. This OI is particularly important because it measures the depth of professional growth during the academic year. The rate of honor and conduct offenses measures plebe ability to apply the concepts of special trust and confidence as well as personal accountability detailed earlier in this research. The rate of attrition measures overall capacity of the plebe class in adjusting to and meeting the continued demands after academic year.

There is little overlap between OIs. Each indicator measures a unique aspect of the desired outcome. However, conduct and honor offenses make up a small proportion of the military performance grade. Also, conduct and honor offenses can be the root cause of attrition.

Relevant feedback is provided by these OIs. Low academic or military performance grades are indicators that plebes are having difficulty meeting the day-to-day challenges of the Academy. High rates of conduct or honor offenses indicate plebe inability in applying aspects of personal accountability and discipline. Physical Readiness Test grades indicate plebe motivation in maintaining the high level of fitness acquired during Plebe Summer.

Although the curriculum is designed to provide plebes with the skills, tools, as well as methods to apply them within the Academy's culture only small portions of these OIs are controllable by the Plebe Summer curriculum. Continued plebe development after Plebe Summer is dependent on other outside forces such as the motivation and ability of Academy personnel in this continual development. Furthermore, individual plebe personal situations vary widely. The effect of staff

motivation and training or the plebe personal lives, outside the academy, are not taken into consideration with these indicators

*c. Data Collection Method Analysis*

No data collection procedures are specifically designed to support Plebe Summer performance measurement. However, useful data is collected for each indicator that allows for comparison among the entire plebe class and between plebe years. Indicator data is collected and stored in the MIDS database

Table 4. Transition to Brigade Preparation Worksheet

Outcome	Outcome Indicators	Effective Data Collection Procedures	Effective Benchmarks	Effective/ Non Effective
Plebe Development and Performance Continues during Academic Year	1. Academic Grades 2. Military Performance Grades 3. Attrition Rate during Academic Year 4. Honor/Conduct 5. PRT Scores	1. Y 2. Y 3. Y 4. Y 5. Y	1. Y 2. Y 3. N 4. N 5. Y	1. E 2. E 3. E 4. E 5. E

*d. Benchmark Analysis*

The indicators for this objective have strong benchmarks. They are well defined and are easy to collect and apply class-wide. Moreover, the benchmarks provide for easy comparison with previous classes or pre-determined targets. As reported earlier, conduct and honor offenses have no minimum targets but can be easily applied to comparisons with previous classes.

Grade point average and Military performance grades (MQPR) are reported and recorded in the MIDS database. A minimum GPA and MQPR of 2.0 out of 4.0 is required to pass. Minimum scores for the PRT vary with age and gender. However, specific minimum scores are identified. Moreover, PRT scores can be

collected class-wide for comparison against pre-selected targets or previous plebe performance.

Attrition rates and incidence of honor/conduct offences are collected in the MIDS database. There are no minimum benchmarks for these indicators. The data collected is, however, easily compared with previous plebe classes.

*e. Conclusions*

There are no specific performance measurement procedures defined for this objective. Nevertheless, the ad hoc performance measurement methods applied to this objective by academy personnel are more successful in assessing objective success than the previous three objectives.

The objective and its outcome are very well articulated and contain no undefined terms. This allows academy personnel to better identify indicators, data sources, and benchmarks.

Data is collected that is easily accessed and provides for easy comparison inter-class as well as intra-class. Furthermore, clear performance benchmarks are available for three of five indicators that provide easy comparison with previous performance or pre-selected targets.

**D. CHAPTER SUMMARY**

This chapter analyzed the performance measurement and outcome management procedures used to assess the success of the Plebe Summer program in meeting its objectives. Four objectives were identified followed by an analysis of the performance measurement and outcome management procedures applied to each objective.

Only one of four objectives is supported by effective performance measurement and outcome management procedures. Moreover, each objective is supported by procedures that are improvised due to the lack of defined performance measurement and outcome measurement procedures in Plebe Summer governing instructions.

The following chapter provides a summary of the complete research, research conclusions, and recommendations for the Naval Academy and further research.

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## **VI. SUMMARY, CONCLUSIONS, AND REOMENDATIONS**

### **A. SUMMARY**

The purpose of this research was to assess the effectiveness of the Plebe Summer performance measurement and outcome management procedures in measuring the success of Plebe Summer objectives. First, the United States Naval Academy and its mission were introduced. The Academy has been the premier source of Naval officers for over 150 years focusing on the development of young men and women morally, mentally, and physically. The role of Plebe Summer as the foundation of midshipman development was then presented. Plebe Summer is a diverse program of cultural indoctrination and training designed to produce fourth-class midshipmen who function effectively in the Academy's brigade of midshipmen. Plebe Summer is the first military training evolution for most members of the incoming plebe class (USNA, 2001b, p. 1-1).

The principles and concepts of performance measurement and outcome management were next introduced as a management tool designed to assist program managers dealing with increasingly complex systems. Performance measurement, in short, is the process of assessing progress toward organizational goals, including the efficiency with which resources are changed into outputs, the quality of outputs, outcomes achieved and the overall effectiveness of the organization's efforts toward their mission (NPR, 1997, p. 4).

Research shows that the concepts of performance measurement can assist personnel leading programs such as Plebe Summer. Zigon (1998) reports four basic motives to incorporate performance measurement as a part of any management system: 1) you cannot manage what you cannot measure, 2) you cannot improve what you cannot measure, 3) high performance teams require clear goals, and 4) reward systems require metrics. Additional research, directed specifically toward public sector management, indicates that management based on performance measurement systems provide greater accountability, increased service to the public, and increased public participation (NCPP, 1997, p. 3).

The research began with a thorough literature review of all Naval Academy instructions governing Plebe Summer and current literature encompassing performance measurement and outcome management. The literature review had two purposes. The first purpose was to identify Plebe Summer objectives and performance measurement techniques defined by Naval Academy instruction. The second purpose of the literature review was to examine the latest research and practical applications of performance measurement in public and private sectors.

Next pre-interview questionnaires and semi-structured interviews of six Plebe Summer experts were conducted. The pre-interview questionnaires and interviews were designed using Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement. The purpose of the questionnaires and interviews was to collect data from Plebe Summer experts concerning the identification and use of performance measurement and outcome management procedures as they are practically applied by to measuring the success of attaining Plebe Summer objectives. The literature review and interviews defined four Plebe Summer objectives:

- Effect the transition from civilian or enlisted to officer candidate status.
- Indoctrinate and train midshipmen in proper military discipline, courtesy, requirements and traits of special trust and confidence, teamwork, and personal accountability.
- Provide basic training in seamanship, marksmanship, military drill, watch standing, and customs and traditions of the Naval service (USNA, 2001b, p. 6).
- Prepare the Plebe class for integration/incorporation into the Brigade of Midshipmen and the challenge of Plebe academic year.

Naval Academy performance measurement and outcome management techniques applied to each objective were then evaluated using criteria generated by Hatry and Kopczynski's (1997) Guide to Program Outcome Measurement for the U.S. Department of Education. Experts provided information concerning the outcomes, outcome indicators, data collection methods, and benchmarks applied to each objective.

## B. CONCLUSIONS

The Plebe Summer performance measurement procedures are inadequate. There is no specific performance measurement program designed to support Plebe Summer evaluation. The terms and definitions associated with Plebe Summer objectives are not clear to all program staff. Moreover, only three of four objectives are defined by governing Plebe Summer instructions. Although data collection and evaluation occurs, it is based on individual performance rather than program-wide evaluation. Additionally, no quality benchmarks are defined that supports a qualitative evaluation of success. Therefore, ad hoc procedures implemented by Plebe Summer experts are insufficient to assess successful, class-wide, objective achievement.

Terms such as “officer candidate status”, “special trust and confidence”, and “teamwork” must be better defined. Lacking definitive terms, Naval Academy staff is unable to identify specific outcomes that should be monitored as called for by Hatry and Kopczynski’s (1997).

The absence of the fourth objective, (preparing the midshipmen for integration into the brigade of midshipmen) from Plebe Summer instructions places a great deal of stress on Plebe Summer leadership in measuring the objective’s successful achievement. Even though the last objective was not defined by Plebe Summer instructions, it is the only one of the four identified objectives that is supported by effective performance measurement and outcome management procedures. Therefore, it is the only objective with which Plebe Summer leaders are able to make a qualitative judgment on whether the objective was successfully met or not. Perrin (1998) described how varying interpretations of terms and concepts result in measures becoming meaningless in the long term. This is an issue for this Plebe Summer objective because it is an improvised objective and not defined by instruction. Outcomes, outcome indicators, data collection, and benchmarks used for performance measurement of this objective are applied unevenly throughout the brigade and in an ad hoc fashion.

Data is currently collected for a variety of plebe activities such as PRT, academic tests, military performance, rate knowledge, and marksmanship. However, in most cases,

the data collected is not compiled in a central database to represent class-wide performance. This results in the inability to assess program effectiveness. Lacking class-wide-data, outcome indicators are irrelevant because they do not support the program-wide-objectives specified in governing instructions.

## C. RECOMMENDATIONS

### 1. For the Naval Academy

Plebe Summer is an important component in achieving the Naval Academy's mission. This study suggests that the Naval Academy can apply performance measurement and outcome management to assess the quality of Plebe Summer. The Naval Academy should establish a working group to oversee the development of an outcome measurement process for the Plebe Summer program. The following recommendations outline how the Naval Academy can assist a working group in this endeavor.

The first step in developing an effective use of Plebe Summer data is to better define Plebe Summer objectives. While three of four objectives are described through the governing instructions, the purposes of each objective are not defined. Moreover, undefined terms require ad hoc interpretation by staff. The objectives should be modified in order to clarify expectations. This will allow a working group to more accurately identify the outcomes, outcome indicators, and benchmarks required to support an effective measurement process.

Data collection procedures that support program-wide assessment should be designed. Benchmarks are rendered ineffectual without adequate class-wide data that supports comparison among and between years. An important aspect of Plebe Summer data is not collected. Specifically, no data is collected on the opinions of plebes as the recipients of Plebe Summer training. The Naval Academy should develop a method to survey plebes on their attitudes and opinions concerning the effects of the curriculum in preparing them for the challenges of Plebe Year. Topics such as teamwork, special trust and confidence, and discipline can be assessed using such a survey method. Additionally, the academy should survey staff and upper-class midshipmen in order to assess their opinions of program wide performance and the performance of the plebe

class during the academic year. For instance, staff and upper-class midshipmen can provide valuable data on what areas of plebe performance require further development. This type of data would assist a working group in developing and recommending Plebe Summer program improvements.

Benchmarks must be identified by Naval Academy leadership. No performance assessment can occur in the absence of useful comparison structures. While PRT scores and Grade Point Averages have minimum allowable scores, the academy has not specified any level of quality performance that supports comparison between plebe years. The question “is the plebe class performance good or bad?” cannot be answered. Furthermore, benchmarks identifying pre-selected targets are not defined. A working group could recommend possible benchmarks; however the academy leadership must define specific levels of performance qualifications.

## **2. Recommendations for Further Research**

This research focused on the performance measurement and outcome measurement procedures applied to Plebe Summer. There are additional research areas that emerged throughout the conduct of this study. The following paragraphs describe some additional recommended research. There is no detailed performance measurement program specifically designed to support Plebe Summer. Most performance measurement and outcome management is conducted using improvised procedures. Therefore, the additional recommended research can be conducted with the precept of developing such a performance measurement system.

No study has been conducted that measures the opinions of plebes concerning their feelings toward the effectiveness of Plebe Summer in preparing them for the challenges of the Naval Academy. This study recommends the development of a survey to identify the opinions and attitudes of plebes towards the Plebe Summer curriculum. Plebe attitudes towards the Plebe Summer curriculum should be studied before such a survey is developed. The purpose of the study would be to answer the questions, “What areas of the Plebe Summer curriculum do plebes identify as valuable?” and “Do plebes, upper-class midshipmen, and academy staff share common opinions of Plebe Summer curriculum value?”

The absence of benchmarks was a common theme throughout the research. A study could be conducted that would identify levels of performance as they pertain to Plebe Summer. A study such as this would identify benchmarks and performance qualifiers such as “excellent” or “outstanding” that can be attached to class-wide performance. This study could answer the question, “How can plebe performance be classified?”

## **APPENDIX A - PLEBE SUMMER TRAINING TOPICS**

### I. Command Religious Program

<b>Category</b>	<b>Desig</b>	<b>Brief Description</b>	<b>Time Reqd</b>
Brief	CRP 1	Command Religious Program, Plebe Summer Indoctrination	1
Inst	IRT	Interpersonal Relations Training (Three sessions)	3
OpEvnt	-	Worship Services (Optional)	N/A
OpEvnt	-	Plebe Hour (Optional)	N/A
Brief	CRP 2	Command Religious Programs Academic Year Indoctrination	1
Brief	Holocaust	Holocaust Museum Brief	1
<b>Total</b>			<b>6</b>

### II. Physical Education

<b>Category</b>	<b>Desig</b>	<b>Brief Description</b>	<b>Time Req'd</b>
Brief	PEP INDOC	Introduction to PEP	1.5
Inst	PEP	Physical Education Program	36
Exam	IPRT	Initial Physical Readiness Test	1.5
Exam	IPRT	Intermediate Physical Readiness Test	2
Exam	FPRT	Final Physical Readiness Test	2
Inst	USMC O/C	Marine Corps Obstacle Course	2
Exam	USMC O/C	Marine Corps Obstacle Course Timed	2
Inst	SCC	Squad Combat Course	2
Inst	SER (2)	Squad Endurance Run	4
Inst	Crew/Box/ Gym/Wres	Introduction to Competitive Sports and Close Quarters Combat	5
Inst	HTH	Hand to Hand Combat Instruction (1-3)	3
Inst	PCON	Personal Conditioning (1-3)	3
Inst	SWIM	Swimming Instruction (1-7)	7
Inst	TAC	Tarzan Assault Course	3
Inst	CLW	Climbing Wall (3)	6
Brief	-	Intramural/Intercollegiate Sports	2.5
Brief	PE REQ	Physical Education Requirements	1

OpEvnt	Sports Period	Intramural Competitions	42
OpEvnt	-	Basketball Competition	2
OpEvnt	-	Soccer Competition	2
OpEvnt	-	Wrestling Competition	2
OpEvnt	-	Boxing Smoker	2
OpEvnt	-	All Comers Track Meet	3.5
<b>Total</b>			137

### III. Academic

Category	Desig	Brief Description	Time Reqd
Exam	-	Placement Validation Exams	Var
Exam	LASSI	Learning and Study Strategies Inventory	1
Brief	-	Associate Dean Academic Affairs	1
Brief	-	Academic Dean and Provost Remarks	1
Inst	ACR	Advising Period	2
Inst	-	Ac Handbook	1
Inst	-	Ac Advisor/Study skills	2
AdmnEvnt	-	Computer Orientation	2
AdmnEvnt	-	ACE/MBTI	2.5
<b>Total</b>			12.5

### IV. Supply

Category	Desig	Brief Description	Time Reqd
AdmnEvnt	HCT	Haircuts (1-3)	3
AdmnEvnt	BI	Book Issue	1
AdmnEvnt	RTSA 1	Repair Tailor Shop Alteration I	1
AdmnEvnt	RTSA 2	Repair Tailor Shop Alteration II	1
AdmnEvnt	RTSA 3	Repair Tailor Shop Alteration III	1
AdmnEvnt	DUIC	Contract Tailor Shop	1
AdmnEvnt	USI	USNA Store Issue	2.75
AdmnEvnt	USX	USNA Store Exchange	1
AdmnEvnt	-	Uniform Issue Verification	1
AdmnEvnt	-	Computer Issue	3
<b>Total</b>			15.75

## V. Administrative

Category	Desig	Brief Description	Time Reqd
AdmnEvnt	PHOTO	Photographs for Performance/Academic Records	1
AdmnEvnt	-	Urinalysis	2.5
AdmnEvnt	ID	Military ID Processing/Finger Printing/EPSQ Review	2
AdmnEvnt	EPSQ	EPSQ Brief	1
<b>Total</b>			6.5

## VI. Medical/Dental

Category	Desig	Brief Description	Time Reqd
Exam	DEN 1	Dental Exam 1	2
Exam	DEN 2	Dental Exam 2	1
Exam	EYES	Eye/Hearing Exam	3
Inst	FIRSTAID	First Aid Training	2
Brief	-	Health, Hygiene and STD Brief	1
Brief	-	TRICARE Brief	1
Brief	-	Smoking Cessation Brief	1
Brief	-	Drug and Alcohol Brief	1
Brief	-	Eating Disorders Brief	1
<b>Total</b>			13

## VII. Professional Development

Category	Desig	Brief Description	Time Reqd
Brief	ProDev	Department of Professional Development Introduction Brief	1
Brief	CIP	Career Brief	2
Inst	DC	Damage Control 1-3 (P-100)	6
Inst	SIG	Signaling 1-4 (P-100)	7
Inst	KA	Sailing Knockabouts 1-4 (P-100)	11
Inst	LA	Sailing Lasers 1-3 (P-100)	9
Inst	NA44	Sailing Navy 44's (P-100)	6
Inst	Study	Study Time	3
<b>Total</b>			45

### VIII. Commandant

Category	Desig	Brief Description	Time Reqd
Brief	-	Superintendent's Call	1
Brief	-	Commandant's Calls	2
Brief	-	OIC Calls	2
Brief	-	Character Development Officer's Call	1
Brief	-	Regimental Commander's Call	2
Brief	-	Distinguished Speaker Series	3
Brief	SAVI	SAVI BRIEF	1
Brief	SAVI	SAVI TRAINING (2)	2
Brief/ Inst	SELT	Senior Enlisted Time	1
Brief	CCT	Company Commander Time	VAR
AdmnEvnt	-	Personal Time	VAR
AdmnEvnt	-	Counseling Time	VAR
AdmnEvnt	RATE	Rate Review Period	VAR
AdmnEvnt	-	Blue and Gold	VAR
Inst	HONOR	Character Education/ Honor Lessons (1-7)	9
Inst	CD	Character Education/ Character Lessons (1-6)	6
Inst	NL102	Naval Leadership 102	9
Brief/ Inst	HISTORY	Military History and Traditions	4
AdmnEvnt	RIFLE	Rifle Issue/Turn In	1
Inst	COD	Close Order Drill	28
Inst	-	Practice Parades	10
OpEvnt	-	Formal Parades	4
OpEvnt	-	Platoon Drill Evaluation	1
OpEvnt	-	Platoon Drill Competition	1
Inst	WTP	Weapons Training	11
Brief	Sponsor	Sponsor Program Brief	1
Brief	D&B	Drum and Bugle Corps Auditions	1
Brief	MA	Music Activities Auditions	1
Brief	-	Alumni Association Introduction	1
Brief	MUSEUM	USNI Museum Orientation	1
Brief	LIBRARY	Library Orientation	1
Inst	CODE	Code of Conduct Instruction (1-2)	2
Inst	ETIQUETTE	Service Etiquette Instruction	1
Brief	JPJ	John Paul Jones Crypt Orientation	1

Inst	SLI	Squad Leader Instruction Periods (1-22)	22
Inst	SLT	Squad Leader Training Periods (1-5)	5
Inst	RP	Room Inspection Preparation	5
Exam	-	Formal Room Inspection	5
Inst	UP	Personnel Inspection Preparation	3
Exam	-	Formal Personnel Inspection	3
Exam	-	Sea Bag Inspection	1
AdmnEvnt	PHONE	Phone Calls	3
AdmnEvnt	360 FB	360 degree feedback	2
OpEvnt	-	Fourth of July Program	2
OpEvnt	-	8 <sup>th</sup> & I Sunset Parade	2
OpEvnt	-	Plebe Rate Competition/Sing Along	2
OpEvnt	-	Detail Set Turnover	1
OpEvnt	-	Regimental Picnic/Field Meet	5
OpEvnt	-	Holocaust Museum/Vietnam Memorial/Navy Memorial Visit	10
OpEvnt	-	Baseball Game	7
OpEvnt	-	Formal Regimental Dinner	2
OpEvnt	-	Parents' Weekend	N/A
<b>Total</b>			189

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## **APPENDIX B - SQUAD LEADER INSTRUCTION LESSONS**

<u>Lesson Title</u>	<u>Short Description</u>
1. Plebe Rates/Oath of Office	An overview of plebe rates along with a detailed discussion of the Oath of Office.
2. Watch standing	Presentation of Watch standing procedures.
3. Personal Hygiene	Basic practices of personal hygiene and proper care and prevention of foot blisters and skin rashes.
4. Bancroft Hall Orientation	Discussion and tour of the Bancroft Hall layout.
5. Yard Tour	A walking tour of key buildings and monuments in the Yard
6. Honor I	Introduction to the Naval Academy Honor Concept.
7. Naval Customs and Traditions	An overview of Naval and Marine Corps history, heritage, and traditions.
8. Naval Organization	An overview of the organizational structure of the Department of the Navy.
9. Mission of the Naval Academy	Review and gain a more in depth understanding of the mission of the Naval Academy.
10. COC/Followership	Review the structure, purpose, and benefits of the chain of command and good followership.
11. Loyalty/Communication	Review concepts of initiative, loyalty, and communication.
12. Good Order and Discipline	A discussion of the importance of good order and discipline to a unit.
13. Leadership Development	A discussion of leadership and how professional development is accomplished at USNA
14. Enlisted Personnel at USNA	Review of the role of enlisted personnel at USNA
15. Military Performance System	A discussion of the Military Performance System, MQPR, and Fitreps.
16. Admin Conduct System	A discussion of the Administrative Conduct System, rules, and regulations.
17. Honor II	A discussion of the ethical standards required of USNA Midshipmen

<u>Lesson Title</u>	<u>Short Description</u>
18. Military Etiquette	Explanation of the basic principles of military etiquette and protocol.
19. Main Office Watch standing	A discussion of the basic requirements to standing a Main Office watch.
20. Leave/Liberty	A review of Midshipmen leave and liberty policies, and Parent's Weekend regulations.
21. Study Skills/Academics	A discussion of the importance of academics and study method suggestions.
22. Joining the Brigade	Acquaint Plebes with knowledge necessary to transition to the Academic Year.

## **APPENDIX C – EXPERT PRE-INTERVIEW WORKSHEET AND DEFINITIONS**

### **Expert Pre-Interview Worksheet**

The purpose of this interview is to develop an understanding of how Plebe Summer success is measured. This interview is being done as part of an analysis of performance measures used in Plebe Summer for my Master's Thesis. This interview will attempt to identify the following:

- a. The objectives of Plebe Summer
- b. The outcomes each objective is designed to achieve
- c. Indicators of outcome success
- d. Data sources for outcome indicators
- e. Performance Benchmarks for each outcome indicator

Although Plebe Summer has dual purposes, my thesis concentrates only on the training of incoming plebes. The leadership training of upper class midshipmen is not included in this study.

This interview is not an opinion poll. I want to identify exactly how the Naval Academy decides whether Plebe Summer is successful or not (and at what level). This pre-interview is designed to provoke thought, not limit scope. If you feel there are items (objectives, outcomes, indicators, etc) missing or requiring expansion please add them.

Key questions to ask yourself as you work through the worksheet are: *What information is important to me in judging Plebe Summer success? What are the ultimate objectives of Plebe Summer? How do I know if an objective is being met?*

The matrix attached to this coversheet lists the objectives of Plebe Summer as stated in COMDTMIDNINST 1510.2B. Following each objective is a list of outcomes, outcome indicators, data sources and benchmarks. In many instances no information is listed. I ask for your expert opinion on filling in the missing data.

Each *objective* should have one or more associated *outcomes*. In turn, each *outcome* should be aligned with one or more *outcome indicators, data sources, and benchmarks*. The definitions of these terms are attached.

As you work through the matrix please consider:

- a. In your opinion, does this list of objectives cover all the objectives of Plebe Summer?
- b. In your opinion, what are the outcomes these objectives intended to achieve?
- c. What are the indicators of each outcome?
- d. How is data on each indicator collected?
- e. What is the benchmark for each indicator? What are the minimum acceptable levels of performance associated with each indicator?

## **DEFINITIONS**

**Outcome:** Outcomes are not what the program itself did. Rather, outcomes are the consequences of what the program did. They provide information on events, occurrences, conditions, or changes in attitudes and behavior that indicate progress toward achievement of the mission and objectives of the program. **Outcomes happen outside the program.**

There are two types of outcomes **Intermediate Outcomes** and **End Outcomes**.

*Intermediate outcomes* are expected to lead to an ends desired, but are ends in themselves. Examples are participation in program, improvements in learning practices relating to instruction, and increase in hours of study.

*End outcomes* are the desired results of the program. These can be either short-term or long-term. Increased test scores, reduction of conduct offenses, reduced attrition rates.

**Objectives:** This is often attached to the word *Mission*. It is a statement that tells where the program wants to go. What are the overarching results that are planned?

**Outcome Indicators:** This is not the same as *Outcomes*. Outcome indicators specify what is to be measured. Specific indicators will depend on the type of data collection used. Outcome indicators identify specific numerical values that indicate progress toward achieving an outcome (such as percentage or ratio). Examples include percentage of persons qualifying expert rifleman.

**Benchmark:** What do you compare outcome indicator information to? Benchmarks provide a comparison for data. Benchmarks provide the minimum level of performance or change acceptable. Major types of benchmarks include:

Previous Performance (Improvement over time)

Performance of Similar Group (Comparison against the best)

Outcomes of different groups (comparison against the best)

Pre-selected targets (pre-selected standard)

Different delivery practices (use of comparison groups)

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